



UNIVERSITY OF
BIRMINGHAM

**AN EXAMINATION OF THE NATURE, QUALITY, AND PERCEIVED
EFFECTIVENESS OF CONTINUING PROFESSIONAL DEVELOPMENT
OPPORTUNITIES FOR PHYSICAL EDUCATION TEACHERS IN THE
SULTANATE OF OMAN**

By

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A Thesis Submitted to The University of Birmingham for the degree of
DOCTOR OF PHILOSOPHY

School of Sport, Exercise and Rehabilitation Sciences

College of Life and Environmental Sciences

The University of Birmingham

February/2019

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Abstract

There is no doubt that improving the quality of education is priority internationally; and teachers are expected to engage in Continuing Professional Development programmes to improve their practices. Research into teachers' CPD, i.e. what works well and what needs to change to maximise teacher learning, is therefore an important field of inquiry.

In the context of Oman, investment in education, including teachers' CPD, has increased substantially since the 1970s. Despite this, emerging research examining CPD structures and possibilities (mainly for teachers of English), has identified a number of limitations of the existing CPD provision in Oman. Although research on teachers' CPD is increasing, there is no research on PE teachers. Questions thus remain about the nature and effectiveness of CPD provision for PE teachers. To address this gap, the present study sought to examine the nature, quality, and perceived effectiveness of continuing professional development opportunities for PE teachers in the Sultanate of Oman.

A variety of methods were employed to answer the following main research question which was examine the nature, quality, and perceived effectiveness of continuing professional development opportunities for physical education teachers in the sultanate of Oman. Three studies have contributed to answering this research question. The first study relied on a teacher online CPD survey. The second study examined the experiences and perceptions of 11 PE teachers working in post-basic schools in Muscat. A semi-structured interview was implemented. The third study, also employed a semi-structured interview,

focusing on CPD providers from four different organisations in Muscat. The overall finding of this thesis is that there are limited opportunities available for PE teachers in Oman. The formal, government-funded opportunities are not always appropriately targeted and are repetitive in nature. Although teachers reported engaging in some informal learning, this was neither supported nor encouraged in their school. Further research is needed in order to examine the impact on student learning of PE teachers in schools undertaking CPD programmes. Also, an experimental approach could be adopted to provide robust evidence of impact on teacher and student learning.

Dedication

O Allah Almighty! All praise and gratitude be to you.

Firstly, my greatest and sincerest thanks go to the Almighty Allah, without whose help, guidance, and blessing I know I would not have been able to finish this demanding and interesting stage in my life. O Allah, I know, I will never be able to thank you in the way that you deserve.

Secondly, this thesis is dedicated to the soul of my mother and also my father, who believed in me and my ability to achieve whatever I want. Even though my mother has already passed away, I can sense that she is always with me, supporting and motivating me, and that her prayers are still encouraging me at every step of my successful life.

Thirdly, my thanks go to my beloved, my husband Ahmed, who is a source of endless support and encouragement from the moment I embarked on my studies. Thanks also to my daughter, Sara, my darling angel, a source of inspiration every time I look at her, and who increases my motivation to work hard to finish my studies on time so that I may spend more time with her. May Allah bless them!

Acknowledgements

Special thanks to my supervisor, Dr. Kyriaki Makopoulou, for her support and help. She has been an excellent supervisor who has believed in my abilities and encouraged me to keep going. I have learned from her many skills that will enable me to become a good researcher in future. Without her feedback and suggestions, it would have been impossible to complete this work. Many thanks dear Kiki.

My thanks go to my family – my brothers, sisters, sisters-in-law, nephews and nieces, for all their support and sacrifices.

I would like also to thank my father in-law, my mother-in-law, and my sisters-in-law, for their love and support.

Many thanks also to my friends here in the UK for their kindness and support.

Many thanks to all the participants in this study for their patience and for being good responders whenever I required any further information.

My thanks to my friends in Oman who keep in touch with me and for their enduring sacrifice, and finally, my thanks to ‘Safis Editing office’ for their careful revision of some of my English text.

Table of Contents

CHAPTER ONE.....	1
1.1. General Introduction and Study Purpose	1
1.2. The meaning and importance of ‘effective’ Continuing Professional Development (CPD)	4
1.2.1. Definitions of CPD	4
1.2.2. The effectiveness and the importance of CPD	7
1.2.3. CPD provider's role for effective CPD	9
1.2.4. The impact of CPD	10
1.3. The Omani Context.....	13
1.3.1. A brief history of the education system in Oman, its development and reform.....	13
1.3.2. The three main stages of education development from 1970 to 1998 in Oman	16
1.3.3. New Education Reform	17
1.4. Teachers’ Professional Development in Oman	21
1.5. Physical Education (PE) Teachers’ Qualifications in Oman.....	27
1.6. Thesis Outline	34
CHAPTER: TWO: METHODOLOGY	36
2.1. Introduction.....	36
2.2. Research Design (rationale and selected approaches).....	36
2.3. Data collection Tools	41
2.4. Research Paradigms	42
2.4.1. Positivism	43
2.4.2. Post-positivism	44
2.4.3. Critical theory	44
2.4.4. Social constructivism.....	45
2.5. Reflexivity	46
2.6. Ethics consideration	49
CHAPTER: THREE.....	52
STUDY 1: WHAT DO PHYSICAL EDUCATION TEACHERS THINK ABOUT THE NATURE AND QUALITY OF THE EXISTING CONTINUING PROFESSIONAL DEVELOPMENT PROVISION IN THE SULTANATE OF OMAN? RESULTS FROM A NATIONAL CPD SURVEY	52
3.1. Setting the scene	52
3.2. Study purpose	54
3.3. Literature Review.....	55
3.3.1. Effective CPD: formal, non-formal, informal.....	55
3.3.1.1 Formal, non-formal learning	55
3.3.1.2 Informal learning	56
3.3.1.3 Features of effective CPD	56
3.3.1.4 Debate on the effectiveness of formal, non-formal and informal learning	58
3.3.2. The study context: Education and CPD provision in Oman	60
3.3.3. What do we already know about CPD from international teacher surveys?	65

3.4.	Methodology	68
3.4.1.	Research design and participants	68
3.4.2.	Main data collection tool: An Online CPD Survey	71
3.4.3.	Validity and reliability	73
3.4.4.	Data analysis	75
3.5.	Results.....	75
3.5.1.	CPD participation: quantity and frequency.....	75
3.5.2.	Perceptions on CPD quality	77
3.5.3.	Perceptions on the nature and quality of school-based CPD	79
3.5.4.	Correlations	80
3.6.	Discussion	81
3.7.	Conclusion	88
CHAPTER: FOUR		90
STUDY TWO: VOICES NEEDED TO BE HEARD: A QUALITATIVE EXPLORATION OF PHYSICAL EDUCATION TEACHERS' PROFESSIONAL LEARNING EXPERIENCES IN POST-BASIC SCHOOLS IN MUSCAT		90
4.1.	Introduction and study purpose.....	90
4.2.	Literature Review.....	94
4.3.	Methodology	100
4.3.1.	Research design and participants	100
4.3.2.	Main Data Collection Tool – Semi-Structured interviews.....	103
4.3.3.	Data analysis.....	106
4.4.	Results.....	108
4.4.1.	Theme 1 - Understanding what CPD involves.....	108
4.4.2.	Theme 2 - Perceptions on the content and quality of existing formal CPD	111
4.4.3.	Theme 3 - Different ways toward of professional learning	116
4.4.4.	Theme 4 - Recommendations for improving CPD provision	119
4.5.	Discussion	121
4.6.	Conclusion	126
CHAPTER: FIVE.....		128
STUDY THREE: A CASE STUDY IN UNDERSTANDING CPD PROVIDERS' BELIEFS AND PRACTICES IN THE PE-CPD PROGRAMME IN OMAN		128
5.1.	Introduction.....	128
5.2.	Study purpose	131
5.3.	The features of effective CPD and the role of the providers	132
5.4.	Methods	137
5.4.1.	Research design and participants	138
5.4.2.	Main data collection tool: semi-structured interviewing	141
5.4.3.	Data analysis	145
5.5.	Results.....	148

5.5.1.	Theme 1: CPD providers' perceptions on the meaning and the importance of CPD (and what CPD they offered).....	149
5.5.2.	Theme 2: CPD providers' views on the nature and quality of existing CPD provision (and what barriers they encountered)	155
5.5.3.	Theme: CPD providers' view on how to improve the existing CPD provision	158
5.6.	Discussion	161
5.7.	Conclusion	165
CHAPTER SIX		166
6.1.	General discussion	166
6.2.	Summary of findings.....	168
6.2.1.	Chapter three (study one).....	168
6.2.2.	Chapter four (study two).....	169
6.2.3.	Chapter five (study three)	169
6.2.4.	Applications	170
6.3.	Limitations and recommendations for future research.....	171
6.4.	Conclusions and Recommendations	173
References		176
APPENDICES.....		198
6.5.	Appendix A: Examine the nature, quality, and perceived effectiveness of the CPD opportunities which are currently available to PE teachers in Oman	198
6.6.	Appendix B: Examine the nature, quality, and perceived effectiveness of the CPD opportunities which are currently available to PE teachers in Oman	208
6.7.	Appendix C: Examine the nature, quality, and perceived effectiveness of the CPD opportunities which are currently available to PE teachers in Oman	211
6.8.	Appendix D: Examine the nature, quality, and perceived effectiveness of the CPD opportunities which are currently available to PE teachers in Oman	214
6.9.	Appendix E: Examine the nature, quality, and perceived effectiveness of the CPD opportunities which are currently available to PE teachers in Oman	218
6.10.	Appendix F: Permission letter of the study	223
6.11.	Appendix G: Examine the nature, quality, and perceived effectiveness of the CPD opportunities which are currently available to PE teachers in Oman	224
6.12.	Appendix H: School Books, Guides and number of classes accredited for grades (11 and 12).....	228
6.13.	Appendix I Example of interview transcript with PE teachers	239
6.15.	Appendix K: Arabic copy of the survey	266

LIST OF FIGURES

Figure 1: Number of training programmes provided by governorates in 2016' (The Annual Education Statistics Book, 2016/2017)	2
Figure 2: Education System in Oman	18
Figure 3: Numbers of school/classes/students/teachers	21
Figure 4: Teacher Education System	24
Figure 5: Teachers' Education Professional Development	27

Figure 6: 6 Physical Education Department (PHED) at Sultan Qaboos University.....	31
Figure 7: Three Phases of the Present Study	40
Figure 8: Characteristics of workplace as learning environment (Fuller and Unwin, 2011, p. 52)	88
Figure 9: Initial coding in Nvivo 12.....	108
Figure 10: Initial codes of CPD providers' transcripts.....	148
Figure 11: Memo of CPD providers' transcript.....	148

LIST OF TABLES

Table 1: Data collection procedures.....	42
Table 2: Descriptive statistics on the number of CPD programme that teachers participated in last five years	76
Table 3: Teachers' perception on CPD quality in last five years (all five items).....	78
Table 4: School-based CPD	79
Table 5: Characteristics of teachers taking part in the case studies	103
Table 6: Characteristics of CPD providers taking part in the case studies.....	141

LIST OF ABBREVIATIONS

CPD	Continuing professional development
PD	Professional development
PL	Professional learning g
PLC	Professional learning community
CL	Collaborative learning
PBE	Post basic education
BE	Basic education
GE	General education
MOE	Ministry of education
TO	Technical office
SCPTT	Special centre for the professional training of teachers
SQU	Sultan Qaboos University
GCC	Gulf cooperation council
PHED	Physical education department
PE-CPD	Physical education continuing professional development

CHAPTER ONE

1.1. General Introduction and Study Purpose

'It is well understood that education is the best for development. Therefore, it is necessary, for the success of our development plans and the implementation of educational programmes, to work to secure the quality of output of all types of educational establishments in accordance with the general policies of the state, to help attain the goals that we all aspire to achieve'

Speech of his Majesty Sultan Qaboos bin Said in the Council of Oman on 12 November 2012 ('The Annual Education Statistics Book, 2016/2017,').

Educational reform in Oman and other countries around the world has become a priority (Villegas-Reimers, 2003, Shaked and Schechter, 2017, Shaked and chechter, 2018, Schechter et al., 2018, Darling-Hammond, 2017). Specifically, focusing on improving student learning achievement and outcomes should be the main priority, according to a recent report by the World Bank (2012). In Oman, there were two main reasons for educational reform: 1) an observed 'decrease of the quality of education' (and overall student achievement) over the last years despite an increase in per capita education expenditure; and 2) a reported mismatch between the skills the labour market requires for employees to display and the overall outcomes of the educational system (Al Jabri et al., 2018, p. 84). The World Bank world, 2012 conclude that improving the quality of students learning should be the main focus on education policy in Oman.

Over the last 40 years, a number of reforms have been introduced in Oman. Led by the Ministry of Education (MoE¹), (figure 1) reform efforts have focused on improving the efficiency of the education system, the quality of school administration, the content and purpose of the school curriculum, and the quality of school buildings (Issan and Gomaa, 2010, The Annual Report of School Education, 2014/2015). Despite the education system undergoing significant changes since 1970s, it has been argued that more needs to be done to further improve educational outcomes (Al-Higiri, 2017). It has been recognised that ‘a focus on learning quality’ should be central in any educational reforms in Oman to improve education (Ministry of Education and the World Bank, 2014, p. 103). To raise student achievement, the MoE has also invested in Continuing Professional Development (CPD) programmes for teachers, as shown in figure 1, published in Annual Education Statistics Book, 2016/2017.

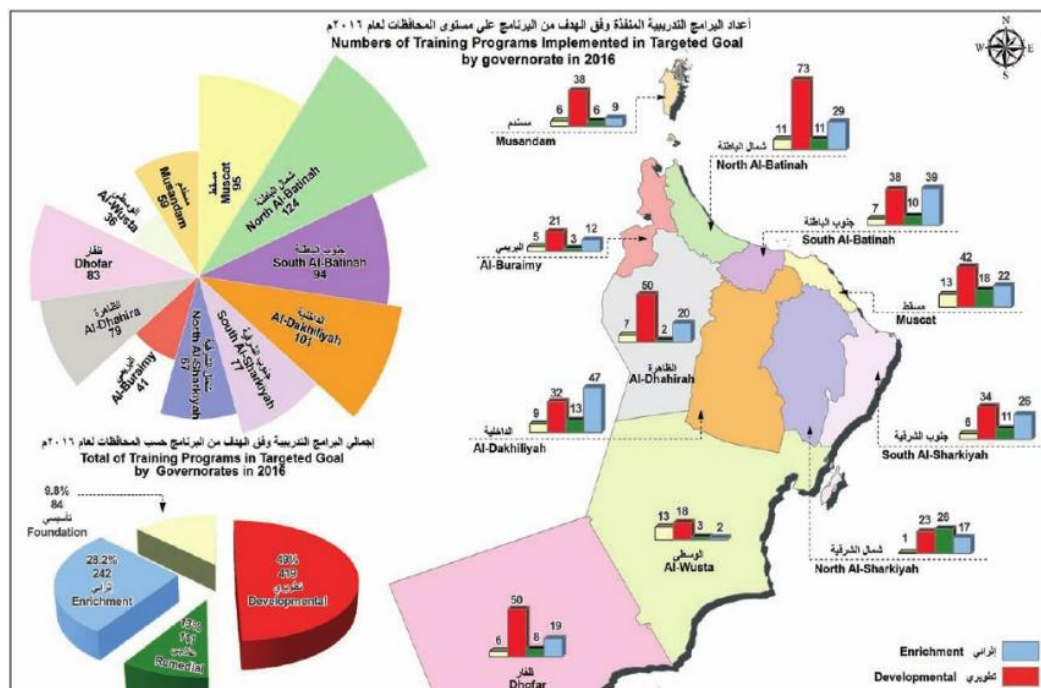


Figure 1: Number of training programmes provided by governorates in 2016' (The Annual Education Statistics Book, 2016/2017)

¹ MOE is established in 1970 by his majesty Sultan Qaboos, it is one of other main two government organization which ad responsible for all matters related to education in country (Al Bulushi, 2017)

It is clearly stated in various Omani documents that any effort to reform and restructure the education system should be accompanied by appropriate CPD for teachers. CPD is presented as an avenue to improve teacher quality and, subsequently, student learning outcomes (Al Jabri et al., 2018). This claims about the importance of teacher CPD in the context of educational reforms to improve outcomes is not unique in the Omani context. Internationally, many countries around the world seek to find an effective way to improve the quality of teaching. Thus, investing in teacher CPD is evident (Gore et al., 2016) and CPD is often located at the heart of debates on educational improvement and successes (Bowe and Gore, 2017).

Despite this unprecedented investment on teacher CPD, there are also concerns regarding the quality and impact of various CPD initiatives (Bowe and Gore, 2017, Gore et al., 2016). The CPD research literature is accumulating and increasing sophisticated methods are used to measure or capture CPD processes and impact (Makopoulou, 2018). However, the vast majority of the available evidence relies on studies that have been conducted in specific contexts (e.g., USA, the UK), studying specific subject areas. Most studies also focus on outcomes such as teachers' efficacy, teachers' satisfactions and teachers' attitudes (Gore et al., 2016, Desimone, 2009). This is also the case in Oman. Typically, CPD programmes are evaluated by teacher questionnaires at the end with the aim to examine teachers' satisfaction. Overall, the results are positive (Al Jabri et al., 2018) suggesting that teachers enjoy their participation and they find the CPD experience useful. Yet, very rarely does the impact of such programmes are evaluated and this lack of research measuring the impact of CPD on teachers' practice and student is acknowledged in official documents (Ministry of Education and the World Bank, 2014). It is also important to note that there is very limited, if any,

descriptive research on teachers' experiences and perceptions of CPD. This is particularly the case for Physical Education (PE) teachers. To address this gap, the present study was set out to investigate not only PE teachers but also CPD providers' perceptions on the content, nature and quality of existing CPD provision in Oman.

Specifically, this study aimed (a) to investigate what do physical education teachers think about the nature and quality of the existing Continuing Professional Development provision in the Sultanate of Oman, (b) to examine teachers' experience, and perceptions regarding the nature, quality and effectiveness of the current professional programme in Oman, and (c) to examine the key aspects of the existing government-funded CPD system in Oman from the perspective of CPD providers.

1.2. The meaning and importance of 'effective' Continuing Professional Development (CPD)

1.2.1. Definitions of CPD

Looking at the relevant international literature, it is important to acknowledge that definitions of CPD vary (Ganser, 2000, Evans, 2011, Collin et al., 2012, Armour et al., 2017, Grant, 2017). Over recent years, however, broad, inclusive definitions have been advocated that encompass any type of professional learning that occurs in a range of contexts (Kennedy, 2007, Makopoulou and Armour, 2011b, DFEE, 2001, DFE, 2010, Desimone, 2009, Gatt, 2016). CPD can range from formal CPD taking place in organized and structured environments with explicitly identified learning outcomes and qualifications (Malcolm et al., 2003, Makopoulou, 2008); to learning that occurs informally in daily activities at work or in other contexts (Prestridge, 2019, Colley et al.,

2002, Kyndt et al., 2016). CPD should lead to professional learning – and it should support teachers to enhance their knowledge and skills, to improve the quality of teaching and learning, and ultimately to raise the standards of student achievement in schools (Ryan, 2019, Darling-Hammond et al., 2017, Armour and Yelling, 2007).

In this thesis, CPD and professional learning will be used interchangeably. In terms of the notion of CPD, it is important to note that various notions with similar meanings can be found in the literature. These include in-service education, teachers' learning, staff development and teachers training (Evans, 2002). It is frequently the case that CPD is understood as a formal course (Fraser et al., 2007) which happens through formal and structured courses and normally outside schools (Rösken-Winter and Szczesny, 2017). On the contrary, professional learning, according to Fraser et al. (2007), often 'represents the process that, whether intuitive or deliberate, individual or social, result in specific changes in the professional knowledge, skills, attitudes, beliefs or actions of teachers' (p.157). Consequently, the term of professional learning is used sometimes with the aim to replace professional development or CPD (Stoll et al., 2012). So, it is important to underline that CPD, in the context of the present thesis, encompasses professional development and professional learning. It is understood as an ongoing process of professional learning that involves change which can be accrued over a long period of time and in various instead of specific educational contexts (Fraser et al., 2007).

The expectations placed upon the potential of CPD in terms of its impact on teacher and student learning outcomes are significant. To achieve these ambitious aims, CPD needs to be effective. The notion of effectiveness has been prominent in CPD rhetoric, policy and

practice over the last three decades. Looking at a dictionary definition, effective' means something or someone being 'successful in producing a desired or intended result'. In terms of CPD in education, the notion of effectiveness is associated to enhanced students learning outcomes, typically as a result of change and improvements in the context of teaching (Armour et al., 2017, Opfer and Pedder, 2011, Stoll et al., 2012). This means that effective CPD is a good thing (Stevenson, 2019). However, there is still an on-going debate on what make CPD effective and what impact it has on teaching practice (Dunn et al., 2019, Stevenson, 2019); and whether CPD effectiveness should be measured against teacher or pupil learning outcomes (Armour et al., 2017). Isolating the effects of different CPD forms or approaches is challenging and not always useful (Hill et al., 2013). In other words, there is no one or specific method or factor that has been shown to be better than other in making CPD effective (Grant, 2017, Powell and Bodur, 2019, Hunuk, 2017).

The prominent argument is that to justify the level of CPD investment, it is important to ensure that teacher engagement in CPD brings positive outcomes to the three aforementioned levels: teachers' knowledge is enhanced; the quality of teaching is improved; and, as a consequence, pupils engage in learning in most meaningful ways and achieve better (Guskey, 2002a, Guskey, 2010). The emphasis on CPD effectiveness has led to an increased demand for CPD research that explores the features of effective CPD (Armour et al., 2017, Ingvarson et al., 2005). This body of research has drawn upon various methodological approaches, such as experimental, quasi-experimental (Cohen et al., 2003, Borko, 2004, Wayne et al., 2008) and longitudinal research (Garet et al., 2001).

Experimental, quasi-experimental research is recognized as a best way to draw a conclusion regarding the relationship between CPD, instructional practices, and student learning (Borko, 2004). However, with the focus on narrowly defined and measurable outcomes, often experimental studies offer very limited details on how and why an intervention has worked or not (Timperley and Alton-Lee, 2008, p. 346); in other words, based on what theories or principles it was designed, what strategies or approaches were implemented (and how), and how and why it has worked or not (Wayne et al., 2008).

1.2.2. The effectiveness and the importance of CPD

Another body of literature seeks to capture the effectiveness or impact of CPD by collecting evidence on the teachers' perceptions and experiences of CPD (Lunenberg et al., 2017). Researchers draw upon case study designs (teachers or schools are the cases) or cross-sectional evidence, such as teacher self-report surveys, with the aim to understand what teachers think is important, relevant and effective CPD. Researchers explore not only what teachers think is effective but also identify the limitations of current provision in terms of CPD organisation and implementation (Armour and Makopoulou, 2012, Armour and Yelling, 2007, Darling-Hammond et al., 2009, Darling-Hammond and Richardson, 2009a). So, some studies are primarily concerned with the impact of CPD (i.e. what outcomes can be reported in relation to teacher and student learning outcomes?) (Borko, 2004). Other studies set out to examine how positive outcomes can be yielded. In other words, what kind of experiences / activities or tasks do teachers need to engage in to maximize the possibility of impact? (Garet et al., 2001, Wayne et al., 2008), as a result of a wealth of research, it was reported earlier in the 21st century that some consensus about some features seems to exist (Borko, 2004, Garet et al., 2001).

There is consensus, for example, that CPD is likely to be effective when it supports teachers to develop a better understanding of the content they teach. Focusing on the content and how student learn specific content are recognized as an effective feature of CPD programme (Kennedy, 2016). In terms of the process of learning, CPD is believed to bring better outcomes if it involves teachers as active learners, it is grounded in theoretically driven practical experiences, and it enables teacher interaction and collaboration (Cordingley et al., 2015, Desimone, 2009). It has also been suggested that it is important for teachers to attend programmes that encourage them to reflect upon their existing perceptions and practices with the aim to review and transform what they offer through meaningful interactions with others and access to new, innovative approaches to teaching and learning (Vangrieken et al., 2017, Stoll et al., 2012).

Despite the volume of research on CPD, current provision, especially when it is formal and of short duration, is regarded as having a number of limitations. Specifically, in the case of short courses, it has been argued that the content delivered is not always designed with the needs of the teacher-participants in mind (Makopoulou and Armour, 2011b, Armour et al., 2017, Makopoulou, 2008). This is highly problematic as it is acknowledged that it highly unlikely that teachers with varying levels of experience in schools and who teach different grades will have the same needs (Louws et al., 2018, Darling-Hammond et al., 2017). This is particularly the case when a ‘one-size-fits-all’ approach is adopted, without meaningful and important support being offered to facilitate teachers during the implementation phase in schools (Opfer and Pedder, 2011, Prestridge, 2019). There are also claims that what is covered during formal CPD is not directly relevant or applicable

in the workplace (Armour, 2006). Looking at this evidence, it becomes clear that the design of formal CPD is therefore a crucial step in the process. Careful consideration of teachers' needs, their motivation to learn and the support they need to change must be given (Darling-Hammond et al., 2017). According to Wayne et al. (2008), it is important also to take in account some theories when designing an effective CPD. These theories include the theory of instruction and theory of change (Wayne et al., 2008). A theory of instruction is a clear articulation of how the knowledge presented during the CPD experience can impact on student learning (Wayne et al., 2008). In other words, it is the link between the teachers' knowledge and the instruction emphasized on CPD and the expectation of change on students' achievements. On the other hand, the change theory refers to the ways the CPD experience can be organised (i.e. CPD features) to bring the desirable change in teachers' knowledge and practice (Wayne et al., 2008). Both these theories should be clearly articulated. At the same time, and in relation to the theory of change, another aspect that is often overlooked is how the CPD will be implemented. Careful attention needs to be given to not only to the design but also the implementation of any CPD opportunity (Darling-Hammond et al., 2017). There is evidence to suggest that the quality of CPD can vary between and across programmes (Makopoulou, 2018). Barriers to effective CPD implementation include inadequate resources (equipment, technology, and curriculum) or a lack of time for planning and implementing and feedback regarding conflicting requirements (Darling-Hammond, 2017).

1.2.3. CPD provider's role for effective CPD

CPD providers are also recognized as a critical factor in the context of professional learning (Le Fevre and Richardson, 2002). It is expected that CPD providers, whether school staff

with CPD responsibilities or external experts, play a central role in supporting teachers to learn (Patton et al., 2012, Makopoulou, 2018). In some cases, CPD providers are responsible to work individually with a small group of teachers with the aim to help them change and improve their teaching practice (Le Fevre and Richardson, 2002, Patton and Parker, 2014, Makopoulou, 2018). In other contexts, they have the responsibility of designing and implementing a workshop or course to a wider audience. In any of these or other context, being good providers or facilitator is not an easy task. Research suggests that CPD providers face a range of challenges, including practical constraints (time and resources), building the necessary trust with teachers, dealing with other power involved in shared teacher leadership (Patton and Parker, 2014, Le Fevre and Richardson, 2002) and support teachers' individual needs (Makopoulou and Armour, 2011b). Moreover, as previously noted, CPD providers should not just focus on providing knowledge and skills for teachers, but they should rather encourage teachers to construct knowledge and, with the right guidance, to be independent learners (Patton et al., 2012). It is being suggested that asking question and listening to teachers is a key element of an effective CPD providers (Hunuk, 2017).

1.2.4. The impact of CPD

When the focus shifts to studies measuring CPD impact, there are ongoing debates about the complexity of measuring impact and the diverse ways this can be done (Pedder et al., 2010). For example, collecting quantitative data at the end of each programme to examine participants' satisfaction only provides an indication of how things worked during the CPD but little is known about its impact (Guskey, 2002b, Goodall et al., 2005). Even though, there are several models that can be adapted in order to examine and evaluate the impact of CPD (Gusaky, 2000; Hahs-Vaughn et al., 2007; Bennett's, 1975), evaluation of

a CPD activity must be on-going and long-term process, and should focus on its impact on teachers' practices but also crucially on evidence of improvement in student learning (Desimone, 2009).

A growing body of research is also examining the nature and impact for non-formal or informal CPD. Non-formal CPD, includes a range of learning encounters that are intentional but not linked to formal qualifications. This might for example include teachers trying to solve a school-wide problem of lack of learning progression amongst disengaged pupils in PE through collaborative planning and sharing of ideas (Makopoulou, 2008, Gatt, 2016, Bayar, 2014). Another example of non-formal CPD includes mentoring schemes in place for newly appointed teachers (Chambers, 2014). On the other hand, informal learning is unintentional. It can take place in various contexts, often without the realisation that learning actually takes place (Armour and Makopoulou, 2012, Darling-Hammond et al., 2017). This is evident, for example, when teachers reflect on why students did not appear to engage with a new game or approach (reflection-on-action, using Schon's terminology, (Schon, 1983). Another example of informal learning is when teachers engage in spontaneous collegial conversations to exchange ideas, share resources, or solve problems (Darling-Hammond et al., 2017, Armour and Makopoulou, 2012).

Informal learning is generally viewed positively, but it can also have no (null) or negative impact (Cordingley et al., 2015). For example, it is true that most informal activities, because they originate in the context of practice and take place in the workplace, are effectively linked to the needs of those engaged in them. This means that their outcome can have a direct impact on their (i.e. teachers') daily work. However, as research

suggests, there is no guarantee that all informal activities are positive or impactful (Makopoulou and Armour, 2014, Armour and Yelling, 2007, Armour et al., 2012). In the early 2000s, Johnson (2003) claimed that there are several disadvantages in collaborating activities, as some teachers experienced ‘work intensifications, loss of autonomy, interpersonal conflict and factionalism’ (p. 346-347). When teachers look for information on their own, or share ideas or knowledge, sometimes incorrect information from unreliable sources is accessed or shared; and this can also affect the quality of informal learning and its impact (Gattte, 2017).

To summarise, the last two decades have seen significant growth in terms of CPD research. The bulk of the available research seeks to answer questions about what makes CPD more or less effective (Armour et al., 2017). However, the evidence base regarding the impact of different forms of CPD is limited and mixed (Cordingley et al., 2015, Day, 2015, Gore et al., 2017), with questions being raised about the quality and effectiveness of both formal and informal as well as ‘traditional’ and ‘reform’ CPD opportunities (Hill et al., 2013). Teachers’ patterns of CPD participation are also under-researched and so are their views on the nature and impact of this participation (Makopoulou and Armour, 2011b, Armour et al., 2017). The study set out to build upon existing research to collect more evidence on PE teachers and CPD providers’ perceptions of CPD and patterns of CPD participation in a specific national context; i.e. the Sultanate of Oman. The following section offers the reader important contextual information.

1.3. The Omani Context

Oman is one of the seven Arab Muslim Gulf countries. It is located in the south-eastern corner of the Arabian Peninsula. It covers approximately 309,500 square kilometres (Alkindi, 2006, Rajasekar and Khan, 2013). Oman contains eleven governorates. These Governorates are divided into 61 provinces. According to the recent population statistic in the 4th of January 2017, the population of Oman was 4,552,688 (54% are Omanis, 46% expatriates) (AL-Balushi, 2017). The official language is Arabic and the most common second language is English. Oman has a strategic geographic location as a result of being situated between three countries: The United Arab Emirates to the northwest, Saudi Arabia to the west, and Yemen to the southwest (Allen Jr, 2016). Sultan Qaboos has been the leader of Oman since 1970. The capital city of Oman is Muscat.

1.3.1. A brief history of the education system in Oman, its development and reform

Before presenting a detailed of reformed Omani education system, it is important to remember that prior to the 1970s, most people in the “Gulf States” lived in rural tribal societies. In this context, and for the majority of the 20th century, the local adult population in Oman was the only source of informal education (Al-Lamki, 2009), inherited from Islamic civilisation. In this context, any informal educational efforts focused on developing a knowledge of the Holy Qur’an and the Arabic language for both boys and girls (from roughly 6-12 years of age) (Alkindi, 2006). In other words, there was no formal schooling, as it is known today, but education consisted of informal interactions/lessons, which took place in local settings (e.g. in mosques, houses, castles, and forests), delivered by volunteers who were, in most cases, senior male or female

members of the local community, widely considered to have a good knowledge of the Holy Qur'an. Up until 1970, there were only three primary schools in the country (Al-Mahdy et al., 2018), with less than 1,000 male students, and there were no schools for girls (AL-Balushi, 2017).

Following the discovery and exploitation of oil, an important changed dramatically for Oman and other countries in the Gulf region (Al-Mahdy et al., 2018). This discovery led to the establishment of the Gulf Cooperation Council (GCC) in 1971 (Annemarie, 2011). The GCC includes Saudi Arabia, Kuwait, Bahrain, Oman, Qatar, and the United Arab Emirates (Annemarie, 2011). As a result of financial prosperity linked to the oil industry, and with increased understanding of the importance/value of educating each and every child, all these countries were in a position to offer state-funded education to children for the first time in their history. However, because this initial general education system did not meet the needs of modern life, these six countries worked together to review and reform existing provisions and to respond to increasing concerns about the need to improve the quality of education (Al-Mahdy et al., 2018).

In realising the importance of high-quality education provision, it was acknowledged that a number of significant challenges should be addressed. These challenges included the gap between traditional education and contemporary education, the imbalance between the expatriate labour force and the indigenous inhabitants of the Gulf countries, and the inadequacies of the traditional education system for meeting the needs of Gulf societies (Annemarie, 2011). These challenges forced the Arab Gulf states to develop their education systems, but it was crucial for any reform initiatives to be in line with religious

beliefs and traditions (Annemarie, 2011). Oman's education system developed significantly following the ascension to the throne of His Majesty Sultan Qaboos on July 23rd, 1970 (Rassekh, 2004). One of the most important reforms that took place at the beginning of what is known as the Blessed Renaissance², was that the education provision in Oman became freely accessible to all citizens. The second major reform was introduced in the 1990s with the strategic priority of improving the quality of education provision (Al-Lamki, 2009). This reform was driven by the specific socio-economic circumstances and demands of the time. Specifically, it derived its directions from the recommendations of the "Future Vision of the Omani Economy 2020" conference, which was held in 1995. This conference set out a strategy of comprehensive development of human resources in the Sultanate.

Ever since he became the leader of Oman, Sultan Qaboos's primary focus was literacy, this because most of the Omani citizens were under poor literacy, therefor, he believed that in order to develop the country, the main focus should be in education (Al-Lamki, 2009). This statement is from his famous speech:

" We will teach our children, even under the shade of a tree."

(His Majesty's speech. November 18th, 1972)

"For a very long time, our country has been deprived of education, which is the foundation of administrative and technical efficiency... because of this, the education and training of our people should begin as soon as possible."

(His Majesty's address to the nation, August 9th, 1970).

² Renaissance era is the day that his majesty Sultan Qaboos became the leader of Oman it was on 23 of July 1970. The day that his majesty promised to do his best efforts to give better life and education for all citizens.

The main aim of the newly formed government was to provide education for all citizens, as His Majesty believed that the country would not develop unless its people were taught. As a response, the number of schools increased rapidly throughout the country, for both girls and boys. The key principle underpinning this was that all Omanis have a right to study, irrespective of their age (AL-Balushi, 2017). As a consequence of this development, the number of schools increased rapidly, to reach more than a thousand in 2016 (Al-Mahdy et al., 2018), from only one Ministry of Education which was established in 1970, located in Muscat (the capital city of Oman) to 11 education directorates³ spread across different Omani governorates (AL-Balushi, 2017).

1.3.2. The three main stages of education development from 1970 to 1998 in Oman

The first stage of education reform focused on ensuring that education was for all; and that both boys and girls had access to schooling (Al-Lamki, 2009). During this stage, however, no schools were accommodated in appropriate buildings due to the fact that the widespread development in education during the 1970s was so fast that it was impossible to construct all the appropriate buildings to the necessary specifications (Alkindi, 2006, Rassekh, 2004).

The second major reform focused on improvements in the quality of education (Rassekh, 2004, Alkindi, 2006). In the early 1980s, a review was carried out into many different components of the education system, including teachers' education (e.g. training⁴), teaching

³ Directorate is a local education which located in each governorate and it is responsible of education and development process in its governorate.

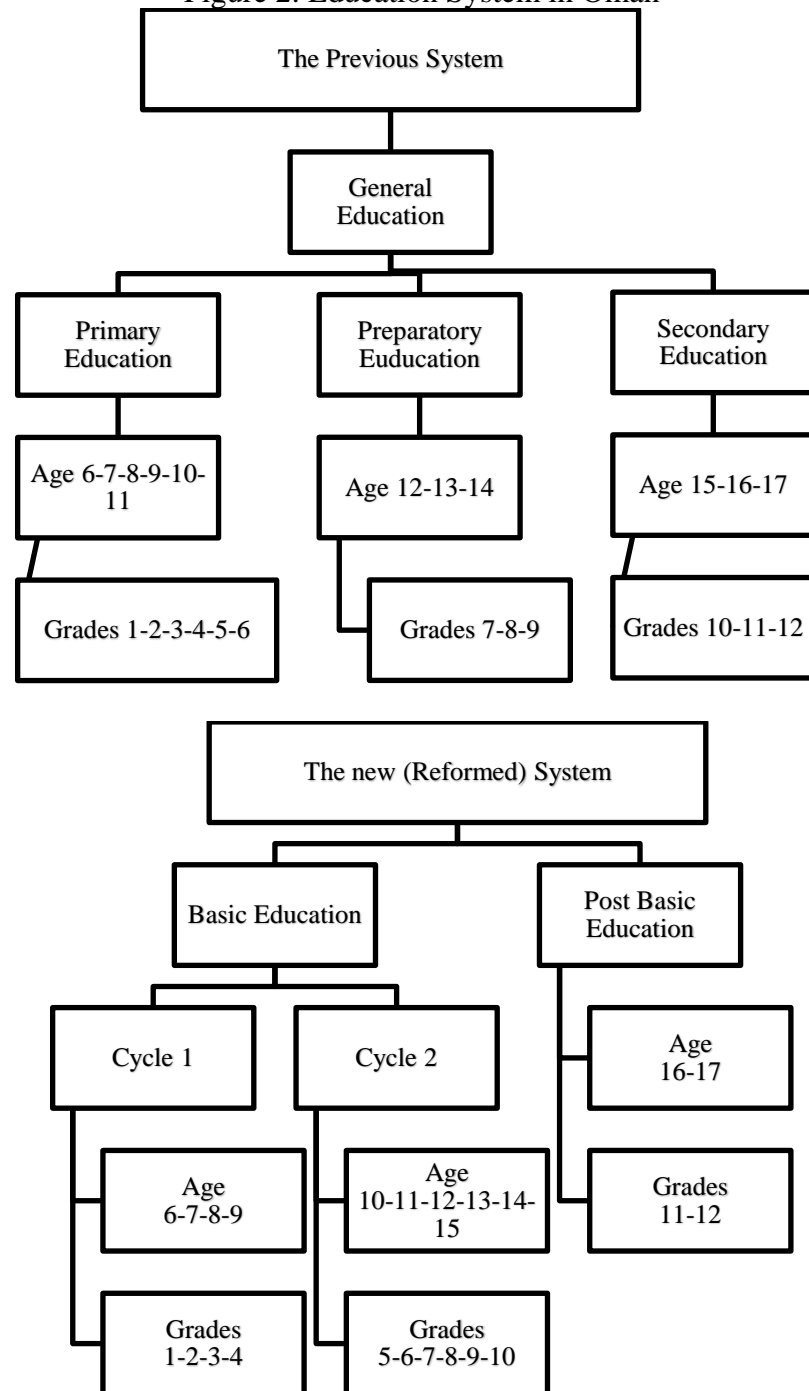
⁴ Most of the teachers at the beginning of this stage are not prepared to specialise, since one teacher can teach all subjects, and, moreover, most of the teachers only had a secondary education or less.

materials, the curriculum, and school construction. During this stage, the education system included a general education (GE), usually starting at the age of six (Alkindi, 2006), and divided into three levels: the primary level (6 years of education, age 6 to 11), the preparatory level (3 years of education, age 12 to 14), and the secondary level (3 years of education, age 15 to 17) (Al-Lamki, 2009). The majority of teachers were recruited from different countries (Egypt, Jordan, Sudan, and India), and there were only a few Omani teachers who had undergone a formal education system (Al-Lamki, 2009). As in other countries across the globe, in Oman, the reform of education, and enhancements in the quality thereof were prioritised (Baporikar and Shah, 2012). Similar to other countries, it was acknowledged that improvements were necessary in order to help learners better respond to the economic, technological and political demands of a rapidly changing world (Baporikar and Shah, 2012). It was also stated that the main aim of any reform is to make a difference to the lives of students, regardless of their background, producing citizens who work productively in increasingly dynamic and complex societies (Issan and Gomaa, 2010).

1.3.3. New Education Reform

The provision of education in Oman is governed by a legal framework based on directives and decrees of His Majesty Sultan Qaboos and the basic laws of the State (MOE and Bank, 2009). Free access to schooling is provided for all boys and girls between the ages of 6 and 17 (Issan and Gomaa, 2010); however, education is not compulsory in Oman (ibid.) Its new education system is called Basic Education (BE), with the view that all children go through ten years of basic education to better prepare them to adapt and face the challenges of the future (Rassekh, 2004). This replaces General Education (GE) (elementary, preparatory, and the first grade of secondary education) (World Data and Education, 2009), (Figure:2)

Figure 2: Education System in Oman



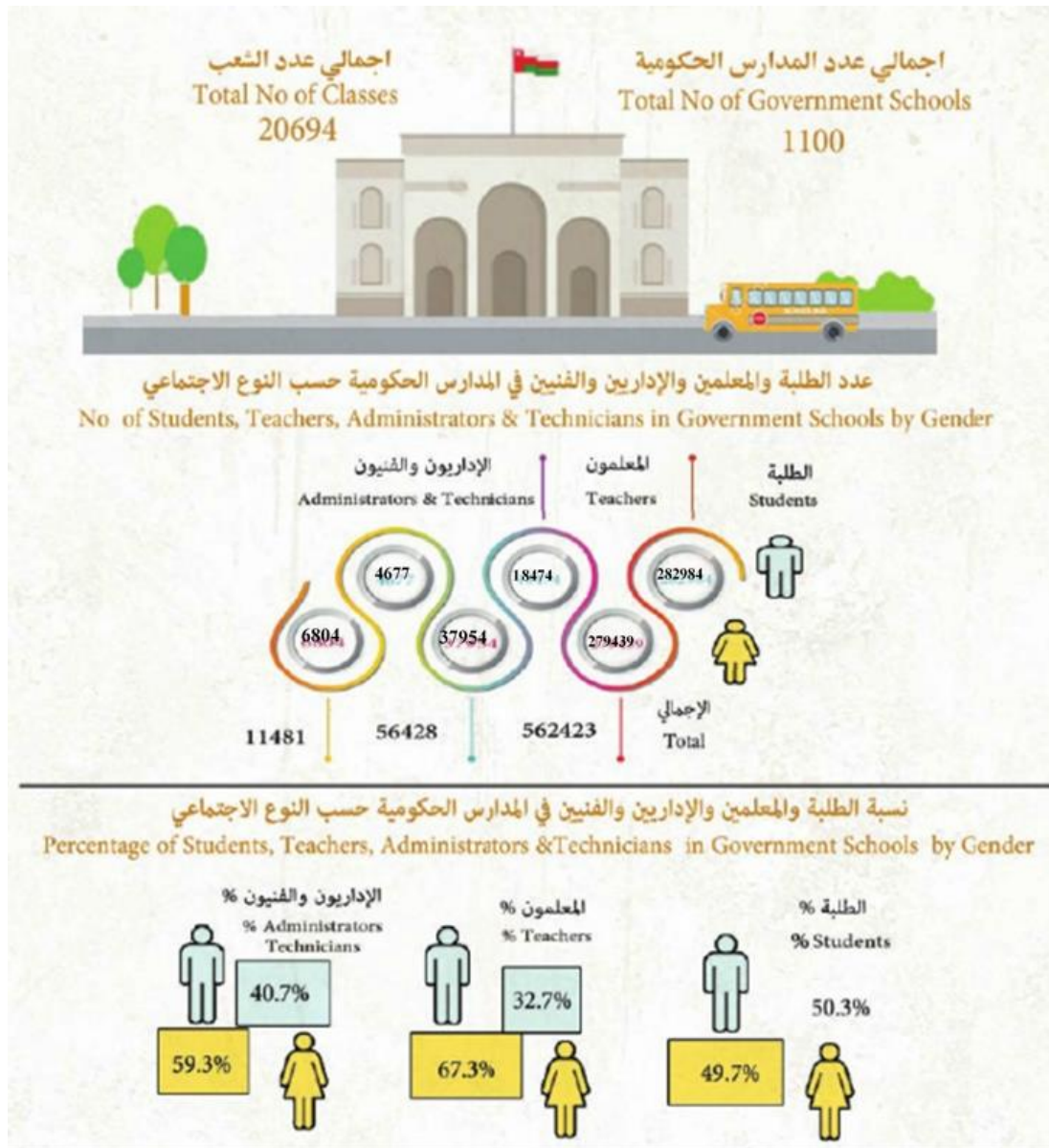
There is no doubt that the General Education system achieved its aims and served the country for a long period. However, GE has been the subject of evaluation since the late 1980s and early 1990s, and, based on this evaluation, it was realised that the GE programme had its shortcomings and, consequently, it was suggested that there is a need for further improvement (Al-Lamki, 2009). Moreover, the government realised that GE could no longer serve the country, its contemporary challenges and requirements and with the aim to achieve peoples' aspirations for the future (Al-Lamki, 2009).

As a result, the new Basic Education system was gradually introduced. At first, only 27 schools in the country implemented this (1998/1999). By 2005/2006, around 507 schools had become involved. By 2010, all schools followed the Basic Education system. BE consists of a unified programme (grades 1 to 10) across two stages: from grade 1 to grade 4, and then from grade 5 to grade 10 (Issan and Gomaa, 2010). Another example of reform and continuing educational development during this stage was the establishment of the Post-Basic Education (PBE) system in 2007, which was conceived as a bridge between Basic Education and higher education, preparing students for the world of work and lifelong learning (Issan and Gomaa, 2010).

Post-Based education is a two-year programme (Appendix: H) (Issan and Gomaa, 2010, p. 23) and it was created in order to improve students' knowledge, values, attitudes, and skills, helping them to choose a major subject of study corresponding to their skills and interests. It was also intended to prepare them to compete in an era of globalisation, with its inherent challenges, and to be able to keep up with rapid future developments.

According to Issan and Gomaa (2010), Post-Basic education was designed to allow students to grow (and to develop the necessary employability skills and other competencies to be able to study at the university) by adopting a student-centred, activity-based approach to learning; by engaging in problem-solving activities that can be applied in a variety of real-life situations; and by emphasising and supporting individual differences and special talents; The establishment of PBE was also stemmed from a finding in 2003 that well over half of all students – around 20,000 – did not access any tertiary education institutes (university, college, or other educational institution) (Issan and Gomaa, 2010). It was widely believed that this was the result of the inadequacy of the previous system to equip students with the proper skills for a sufficient variety of future careers. Its curriculum was perceived as weak and lacking the flexible needed to meet all students' need, abilities, and future ambitions. Moreover, the quality of secondary education under the old system had not reached international standards, so secondary school graduates were not prepared to directly enter many careers (Issan and Gomaa, 2010). This educational reform was thus undertaken to support all young people in the Sultanate of Oman to have access to a quality school education system that complies with the needs of today's globalized world (National Report on Quality Education in Oman, 2004). In 2016/2017 the number of schools in Oman reached 1100 (Figure:3) schools across different regions (The Annual Education Statistics Book, 2016/2017).

Figure 3: Numbers of school/classes/students/teachers



1.4. Teachers' Professional Development in Oman

Although the importance of CPD has been consistently highlighted and acknowledged in CPD policies internationally for a number of decades (Gore et al., 2016, Grant, 2017), given

the lack of formal schooling, it was only in the 1970s that the education of teachers was acknowledged. From early in his reign, as previously explained, it became evident that as soon as Sultan Qaboos became the leader of Oman, he had a clear vision of the importance of education in empowering individuals to grow (personally and professionally) and in pursuing further and richer educational opportunities. It was around this time that the first references to teachers and their learning trajectories were made. In recent years, there is consensus between education experts in Oman that to improve student learning outcomes, teachers and their pedagogy should be the main target of development.

It is also acknowledged that this development should apply not only to pre-service teachers in colleges and university, but also to in-service teachers (Al Jabri et al., 2018). As far as the most recent debate about educational quality, there are three broad strategies that are believed to contribute to the anticipated improvements in teacher quality. These include: (1) developing and modernising initial teacher preparation, (2) selecting the most talented and motivated young people to be prepared as teachers, and (3) expanding, systematising, and updating professional development for teachers (Al Jabri et al., 2018, p. 85).

Although the importance of having a clear strategy in place should be applauded, it is important to acknowledge that such change and improvement is not an easy task. The fact that attracting the best students to teacher education is a strategic priority in educational policy, the extent to which this aim or aspiration is realised depends on the status afforded to the teaching profession by society. If the teaching profession has a low standing, most students are unlikely to choose teaching as their lifelong career (Al Jabri et al., 2018). Furthermore, the status of any profession depends not just on education reform, but also on

wider historical, cultural, and economic factors. In this context, to improve the quality of education, governments must invest in the quality of the existing teachers via the provision of systematic, high quality initial and continuing professional development opportunities (Makopoulou and Armour, 2011).

It is important to note that in Oman, raising the standard of professional development for teachers was not separate from the reform process for improving education. The importance of improving teachers' professional development was acknowledged with the realisation that a number of problems prevailed in schools and these affected the improvement of learning outcomes. One problem was that the quality of teaching varied, due to the variations in initial preparation programmes from one institute to the next. Another reason was the lack of motivation among teachers to remain in the profession. This continues to be a significant issue today (Al Jabri et al., 2018). However, the key issue facing teachers, be they novice, veteran, or experienced, is how institutes prepare them for the real world. In Oman, specifically, for decades, there was a widely held perception that many teachers were not well prepared to deal with the challenges of teaching (e.g., classroom management). It could be argued that this was the case because initial teacher education programmes relied on theory and student teachers had limited opportunities to develop the practical tools to cope with the everyday situations in the classroom.

Another related issue is that different organisations have responsibility for different aspects of teacher education in Oman (Figure:4), which makes any endeavours for learning continuity and progress more challenging. Specifically, while the Ministry of Higher Education (MoHE) is responsible for pre-service, initial teacher education, teachers' CPD –

once employed – is the responsibility of the Ministry of Education (MoE), (Figure:5). Looking at relevant documents, it seems that each Ministry has its own policy when it comes to training. Consequently, there is little evidence of coherence and continuity between initial teacher education and CPD endeavours (Al Jabri et al., 2018). In any case, Oman recently devoted significant efforts to the professional development of teachers. These efforts are illustrated in greater detail in the following section.

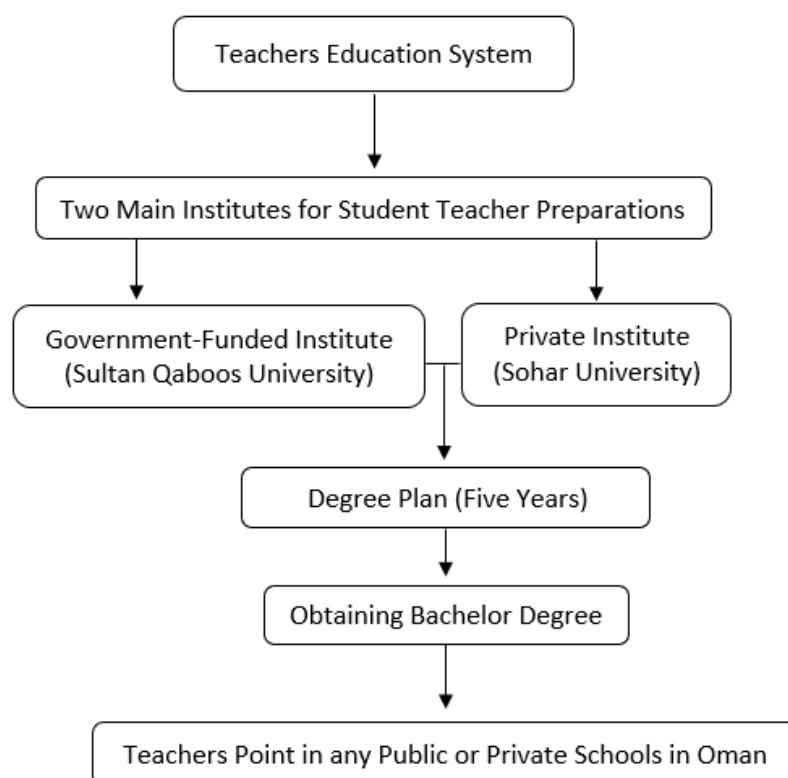


Figure 4: Teacher Education System

Prior to 1998, the widespread perception was that teacher professional development could be realised by the design and implementation of short courses and the inspection system (Al Jabri et al., 2018). The reliance on short courses was perceived to be ‘restrictive’ and the provision was sporadic and poorly planned (ibid). In response to these limitations, the professional development system was subjected to change. In 2014, to alleviate the challenges associated with a poorly planned and incoherence CPD system, and to support

teachers grow professionally, the Ministry of Education established the Special Centre for the Professional Training of Teachers (SCPTT⁵) (Al-Higiri, 2017).

The launch of this centre brought one significant development in the field of CPD; the systematic monitoring of in-service training programmes. Official documents stated that to map and monitor the experiences of teachers and to capture the impact of CPD programmes, continuous data collection and analyses are undertaken (Al Jabri et al., 2018). The vision of this centre is to regard teachers as active partners in the development of education (Al-Higiri, 2017). Specifically, the SCPTT aims to enhance the educational process through improving the skills of teachers and other educators (Al-Higiri, 2017). This centre seeks to systematically design appropriate training for teachers and to select appropriate tutors or professional developers to ensure that teachers receive sufficient and adequate theoretical knowledge and practical experience to improve their teaching (Al Jabri et al., 2018).

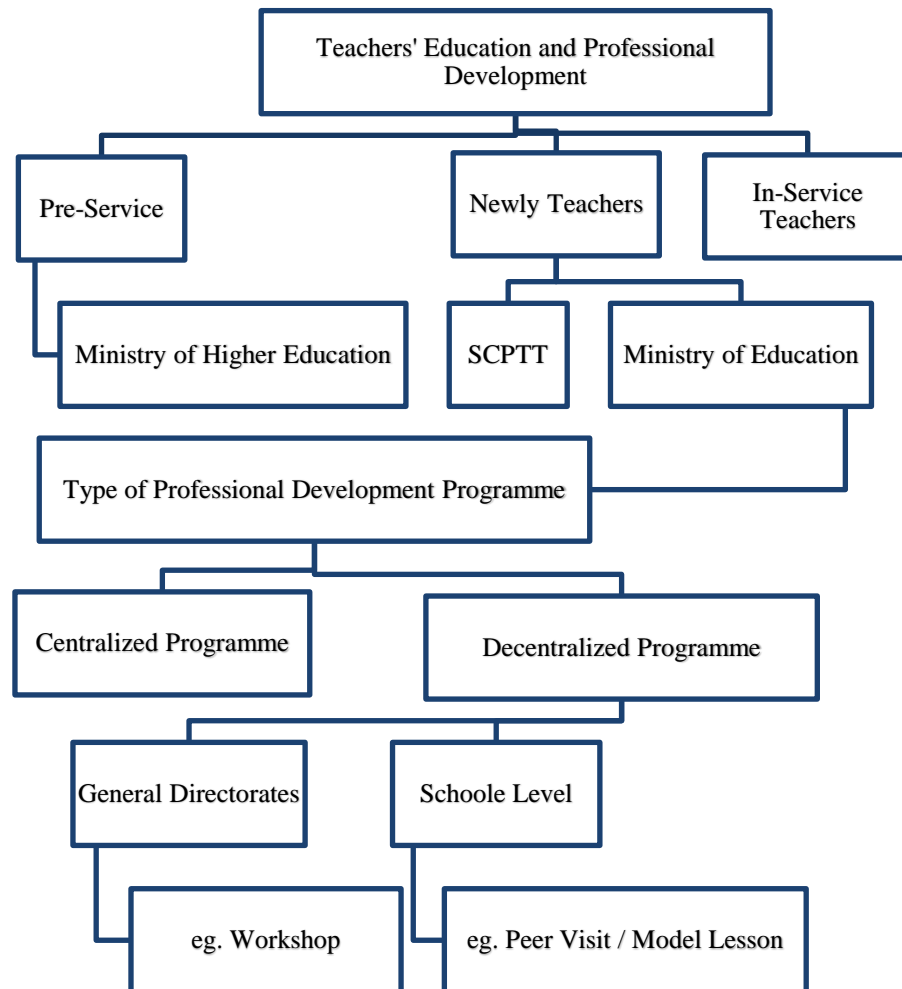
There are three learning components in the SCPTT: Face-to-face teaching, online learning, and workplace learning (Al-Higiri, 2017). The target audience of this centre varies, however. This part is focused on novice teachers. The programme for novice teachers targets all recently appointed teachers who are employed to teach in government-funded (state) schools (Al-Higiri, 2017). With the broad aims of seeking to enhance teachers' knowledge and skills (Al Jabri et al., 2018), this programme focuses on the importance and implementation of constructivist approaches to teaching and learning, inquiry-based learning and overall creative approaches to teaching (SCPTT, 2016) (Al Jabri et al., 2018). So, it could be argued

⁵ (SCPTT) is a state-funded CPD organisation which specialises in trainee teachers, school administrators and local supervisors or CPD providers

that the centre is seeking to ground the CPD of newly appointed teachers in contemporary understandings of effective teaching and learning.

Emerging evaluation evidence suggests that the centre is effective at improving teachers' skills (Al Jabri et al., 2018). Yet, changing teachers' skills does not mean that changes at level of educational practice / pedagogy also occur since applying new skills and knowledge is affected by the school culture in which teachers work (Al Jabri et al., 2018). Based on the outcomes of a number of interviews with teachers who participated at this training centre, they said that they experienced some obstacles at school when trying to apply what they had learned from the SCPTT. Most teachers reported that they had not received sufficient support in their schools during the implementation phase. Researchers from the centre have thus identified a significant direction for future research: to understand the specific conditions in schools that facilitate or hinder professional learning and to explore ways to support teachers in the process (Al Jabri et al., 2018).

Figure 5: Teachers' Education Professional Development



1.5. Physical Education (PE) Teachers' Qualifications in Oman

Similar to other countries (Oh et al., 2013, Starc and Strel, 2012, Brodin and Renblad, 2015, Brundrett et al., 2010), physical education (PE) in Oman is recognised as a curriculum subject that may achieve a wide range of outcomes (AL-Sinani, 2014). These include not only physical competency and cognitive development, but also creativity as well as social skills, including respect for others and the ability to work in a group. Instilling positive attitudes towards participation in physical activity and learning (Physical Education

Curriculum, 2017) is also considered important (Physical Education Curriculum, 2017, AL-Sinani, 2014). Meeting the needs of students is recognised as an important aspect of good or high-quality PE provision so that children and young people understand the importance of leading ‘a healthy lifestyle’ (AL-Sinani, 2014, Al-Rwahi, 2008). Reference has also been made to the importance of developing a ‘knowledge and understanding of physical fitness and health’ (Physical Education Curriculum, 2017).

The Physical Education Department (PHED) (Figure:6) at Sultan Qaboos University (SQU) is the only government educational institution in Oman that qualifies graduate students to pursue a teaching career in this PE curriculum be employed in other sport-related positions. Since its founding in 1990, more than 24 cohorts of PE teachers have graduated and now work as PE teachers, supervisors, sport managers, and sport trainers in many organizations. The degree course consists of a theoretical element of sports physiology, kinesiology, psychology, sports administration, teaching methods, and principles of coaching. The PHED is committed to achieving excellence in academic research and dissemination of research evidence, organises workshops, seminars, conferences (so it has an important CPD role), and is involved in sporting events in collaboration with other organisations. The PHED seeks to work towards activating the overall, national strategic plan to improve the educational process and achieve excellence in all specialized areas of physical education. According to SQU-Physical education department website, the specific aims that the PHED is required to pursue, are listed below:

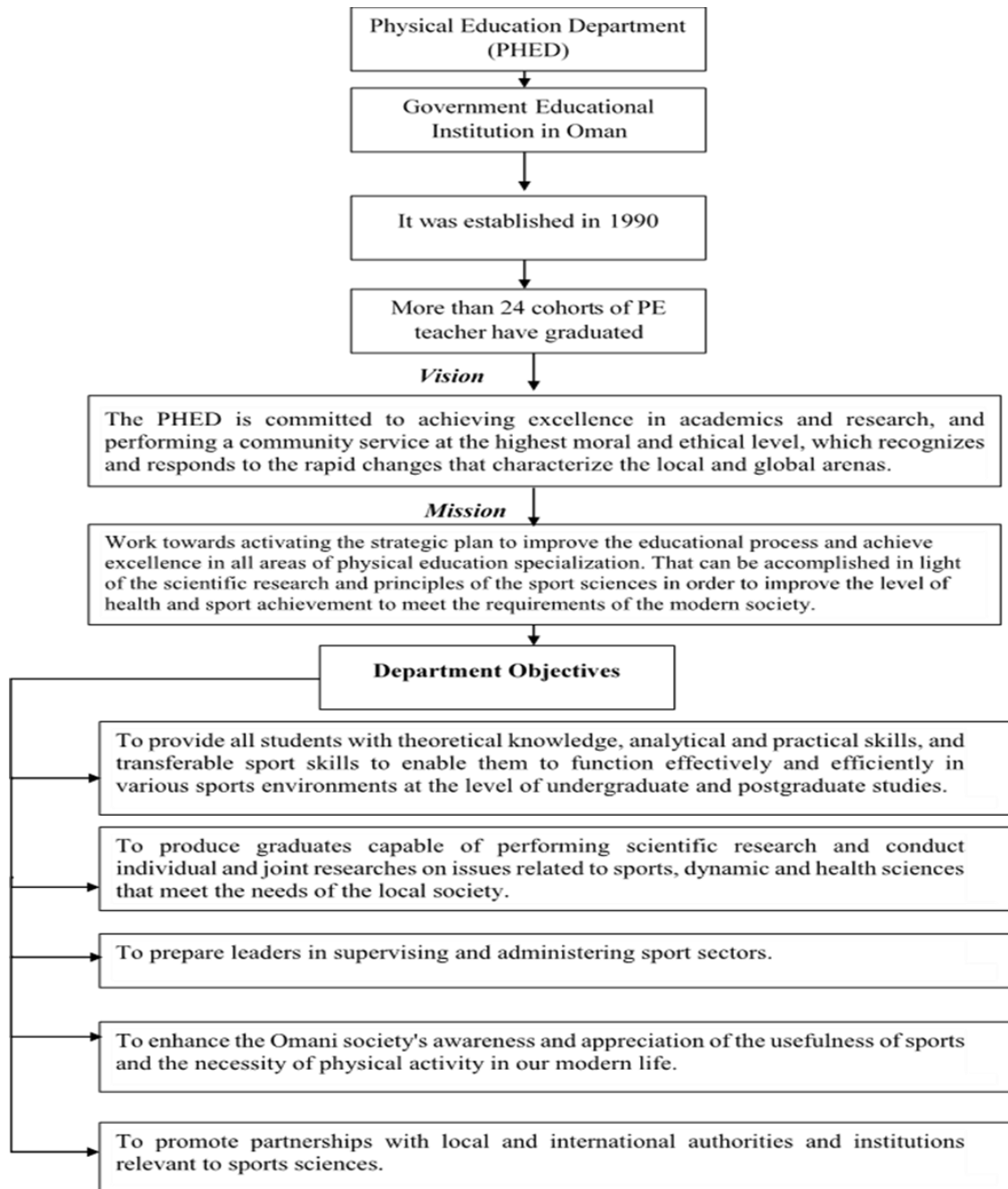
- To provide all students with a theoretical knowledge, along with analytical and practical skills, as well as transferable sport skills, to enable them to function effectively and

efficiently in various sports environments at the level of undergraduate and postgraduate studies.

- To produce graduates capable of performing scientific research and conducting individual and collaborative research on issues related to sports and health sciences that meet the needs of the Omani society.
- To prepare leaders who will supervise and administer sporting events.
- To produce professionals who are effective in enhancing Omani society's awareness and appreciation of the usefulness of sports and the current need for more physical activity.
- To promote partnerships with local and international authorities and institutions related to sports sciences.
- PHED graduates are expected to develop the knowledge and skills required to achieve the following outcomes:
 - Display a deep understanding of pedagogical and cultural knowledge and their applications in various contexts.
 - Plan instruction that considers learners' diversity and individual developmental needs.
 - Use advanced technology to support teaching and assessment.
 - Develop learners' critical thinking, creativity, and problem-solving skills.
 - Collaborate with learners' families and the wider community to support the learning processes.
 - Communicate effectively with colleagues and community institutions to promote professional practices.
 - Employ a variety of assessment methods and reflect on teaching and learning performance.
 - Demonstrate leadership skills appropriate to their professional roles.

- Use research as a tool to develop their teaching and professional practices.
- Demonstrate competence in performing and teaching various motor and movement skills.
- Comply with the administrative, organizational, technical, and legal rules of games and sporting competitions.
- Raise awareness regarding the importance of physical activity and the avoidance of sedentary habits inside and outside school.

Figure 6: 6 Physical Education Department (PHED) at Sultan Qaboos University



In order to qualify to teach in state-funded schools, graduates must also pass the written Employment Test (ET) that the MoE introduced in 2008/2009, as an attempt to improve the quality of teachers recruited. Specially, this test was introduced to ensure that all appointed teachers demonstrated sound pedagogical knowledge and professional teaching

competency prior to employment. The national test is administered annually. Passing the ET is equivalent to receiving a national licence to teach ('National Council for Accreditation of Teachers Education Report,' 2014). It is interesting to note that the ET for PE teacher candidates (TC) has two components:

- (i) A knowledge test, which includes 100 multiple choice questions assessing candidate content and pedagogical knowledge; and
- (ii) A fitness test, measuring candidates' fitness (e.g. cardiovascular and muscular endurance, flexibility, agility, and strength).

There is a minimum score candidates need to achieve in order to be successful (50/100) (Report to NASPE, National Association for Sport & Physical Education, 2008). Failure to pass the ET excludes TCs from teaching, but they are allowed to retake the test the following year (National Council for Accreditation of Teachers Education Report, 2014). Overall, higher education providers must adhere to the recently introduced standards (2010) that are aligned to those of NASPE⁶ in the USA. The introduction of these standards represented a significant departure from the previous system, as the duration of the studies to become a PE teacher increased from four to five years. Furthermore, an emphasis was placed in developing teachers who are knowledgeable, skilful, motivated, and independent thinkers (Al-Sinani et al., 2010). So, there was a clear shift towards articulating clear and achievable goals. The PE course content also changed, with a clear focus on addressing all areas of the PE curriculum and the aim of strengthening a candidate's subject knowledge, curriculum

⁶ PE in Oman standards aligned with NASPE because PE in Oman follow the INCATE and with the INCATE ,NASPE is one of its organisations for the PE department, NASPE transferred recently to shapes standard.

and their pedagogical knowledge to be capable to teach in different school stages in the way that could enhance students' learning and improve their outcomes.

The intensity of placements was also increased; i.e. school placements (training course at public school for the final year PE students) now require trainee teachers in their final semester to teach their classes full-time under the supervision of a trained mentor who is usually trained by professor from the main university.

These changes reflect international views on the importance of high-quality job-embedded initial teacher education (Armour et al., 2017, Darling-Hammond et al., 2017). They were also intended to offer student teachers the chance to develop an in-depth understanding of specific contexts, policies, and procedures, and to apply their theoretical knowledge regarding pedagogy and assessments in practice. Since the introduction of the national standards, a much clear emphasis on teacher ongoing and career-long professional development is also evident. Yet, as previously noted, there is a lack of systematic research to examine PE teachers' experiences of the available CPD opportunities. This study set out to address this gap.

Since education reform in Oman, it has been argued that the key to improving the quality of education is to focus on teachers' learning. Teachers are the cornerstone of the education system. Although a teacher is just one factor among several that can affect the quality and impact of education, there is a great belief, which is supported by evidence from international studies (King, 2014, Armour et al., 2017, Makopoulou and Armour, 2011a, De Vries et al., 2014, Zhang and Wong, 2018), that the teacher factor has a significant impact on student attainment. In light of this, the MoE in Oman is investing heavily in CPD programmes for

teachers. Hence, it is important for researchers to examine the effectiveness of such programmes, especially of PE-CPD courses, since no research has so far examined the state of PE-CPD and the extent to which it is effective. This study will be the first to focus on examine the nature, quality and perceived effectiveness of the existing Continuing Professional Development opportunities for PE teachers in the Sultanate of Oman, it was also set out to offer concrete recommendations to policy makers and CPD designers.

1.6. Thesis Outline

Following the introduction (Chapter 1), this thesis is organized into four chapters:

- Chapter Two: This chapter seeks to provide a methodological overview; i.e. an overview of the three studies and how they align with the overall research questions; the overall research design; the researcher's position (reflexibility); and ethical consideration.
- Chapter Three: This chapter presents evidence from the first study which sought to 'map the terrain' of existing CPD for physical education teachers as captured in a national CPD survey distributed in the Sultanate of Oman. Evidence is intended to inform not only CPD policy and practice in Oman but also collective understandings about the nature of PE teachers' engagement in CPD more broadly.
- Chapter Four, the aim of this chapter is to examine PE teachers' experience about nature, quality and effectiveness of PE-CPD. A qualitative, teacher case study approach was adopted. The study was designed to offer in-depth insights into PE teachers' experiences in order to inform thinking about CPD policy and practice
- Chapter Five: This chapter aims to examine the key aspects of the existing government-funded CPD system in Oman from the perspective of CPD providers. Listening to their

voices and experiences was important as they play a central role in supporting teachers to learn. Therefore, collecting evidence on these CPD providers' perceptions was therefore vital in order to develop a holistic understanding of the CPD process in a given national context.

- Chapter Six: This chapter includes a general discussion, a review of the study limitations, recommendations for CPD policy and practice as well as future research, and a general conclusion.

CHAPTER: TWO: METHODOLOGY

2.1. Introduction

The purpose of this chapter is to provide a broad overview of the three studies and how they align with the overall research questions. Considerations on the research design are offered, in the context of a debate on the main research paradigms. The chapter progresses with a section on reflexivity to explain the position of the student researcher in the study, as both an insider and outsider in the research process, and what kind of impact this has had on the study. The chapter concludes with the relevant ethical considerations.

2.2. Research Design (rationale and selected approaches)

The overall purpose of the present study was to examine the perceptions and experiences of PE teachers and CPD providers regarding the nature, quality, and perceived effectiveness of CPD opportunities for PE teachers in the Sultanate of Oman. A mixed methods approach was utilised in order to gain in-depth insights about research participants' perceptions (qualitative) and to examine, at a larger scale, the patterns of PE teachers' participation in CPD, its perceived impact on teachers' knowledge and practice, and how these correlate (quantitative). Mixed method research is defined as a type of inquiry where the researcher combines qualitative and quantitative research approaches into a single study (Shannon-Baker, 2015). Researchers apply mixed methods in order to provide a more thorough understanding of a phenomenon that would not have otherwise been accessible through using a single method alone (Creswell & Plano Clark, 2011).

In the context of the present study, a mixed methods approach was selected to address an important knowledge gap within the PE-CPD literature. Most published research adopts a

qualitative approach. Whilst this offers in-depth insights into what research participants believe and why, questions remain about the patterns of CPD participation and what PE teachers believe is the impact of CPD on a larger scale. It was therefore important to investigate the relationships / correlations between variables in relation to PE-CPD (participation, satisfaction, perceptions on effectiveness etc.) on a larger scale by drawing upon qualitative methods; and at the same time enhance our understandings of research participants' thoughts, experiences and perceptions (qualitative) (Thomas, 2011). It is important to stress that qualitative methods are not 'better' than quantitative – and vice versa. The decision on which of the two methodological approaches, or combination of approaches, is needed relies on the research questions set. In the case of the present study, it was paramount to 'map the terrain' (Borko, 2004) of existing CPD provision as no previous research had provided evidence on the types and frequency of CPD participation for PE teachers, what they believed about the effectiveness of the current provision in place, and what the perceptions of PE teachers in Oman about the existing CPD support in their schools (study one). It was however also important to understand why PE teachers held these views. What factors affected their engagement in CPD, what worked well (i.e. what CPD they believed was effective), what could be improved and why. This necessitated the adoption of a quantitative methodological approach (study two) to answer the following research questions; what are the PE teachers' understandings of the notion of CPD? what forms/types of CPD do PE teachers in Oman participate, how often and why? What CPD do PE teachers find effective and why? What are the PE teachers' recommendations for future CPD programmes?

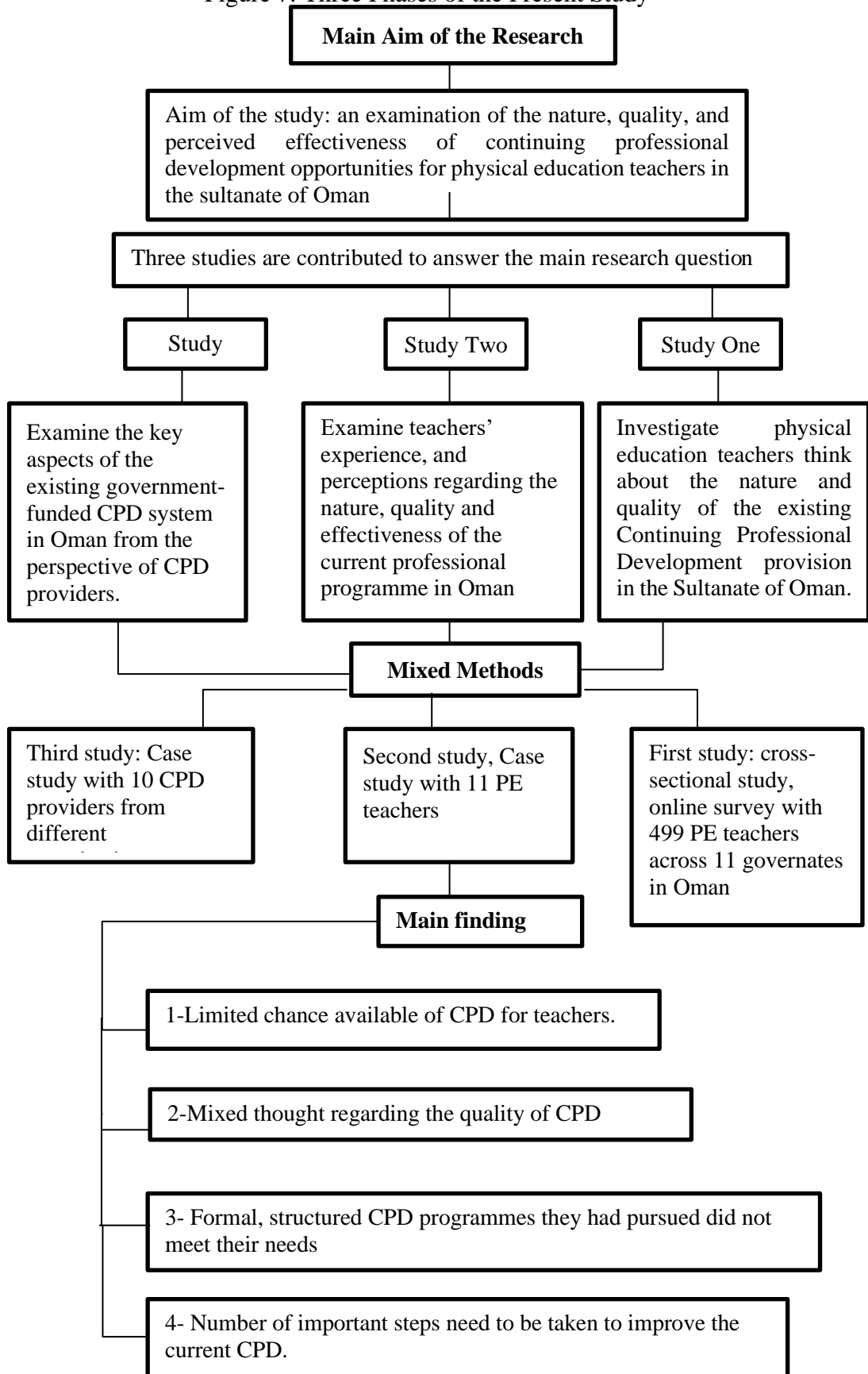
It was also important to examine the views and experiences of not only PE teachers but also key CPD stakeholders. Researchers have explained that in order to understand the complex and multidimensional processes of CPD and teacher learning, and what consists of high quality CPD, all elements or aspects of the CPD system must be examined and understood (Louws et al., 2017b, Marsick and Watkins, 2015). It is widely recognised that CPD providers play a central role in supporting teachers to learn (Makopoulou, 2018; Patton et al., 2012b). What makes CPD delivery – or what Poekert (2011) called the pedagogy of facilitation – effective, is still investigated (Makopoulou, 2018). What is however clear is that the views and experiences of CPD providers are equally important to that of the teachers; as they can offer their unique perspective on how CPD provision is delivered (and why), what works well and how existing systems could be improved. In this context, involving CPD providers in the research, and understanding their perceptions was vital in order to develop a holistic understanding of the CPD process in a given national context (study three).

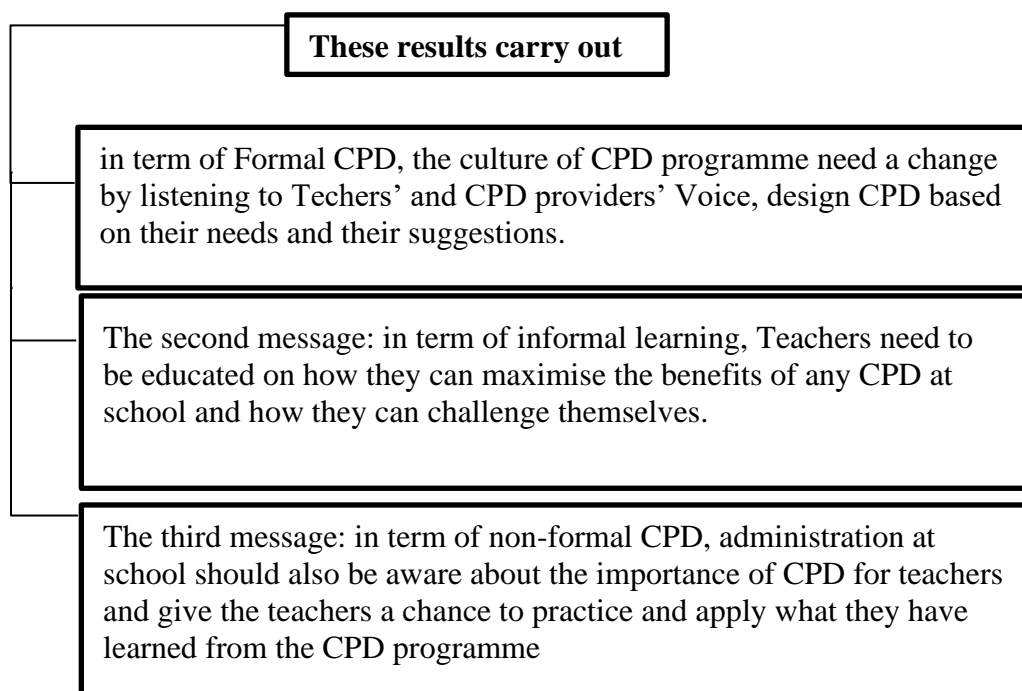
To address these important aspects, and in the light of these theoretical / methodological insights, the data collection process took place in three overlapping phases (with each phase corresponding to one study, as reported in this thesis). The three overlapping phases are:

- Phase One: Online cross-sectional survey for PE teacher working across 11 governorates (November 2016 – April 2017)
- Phase Two: Individual case studies with PE teachers (case =11 PE teacher_ (November- 2016- June 2017)
- Phase Three: Individual semi-structured interviews with 10 CPD providers (December 2016– June 2017).

All these three phases are linked together (Figure: 7) in order to answer the main research question. Specifically, the first study (phase one) aimed at ‘mapping the terrain’ (Borko, 2004) of existing provision and to offer a clear description of PE teachers’ perspectives at the time of the research (rather than explore change over time). The design of the first study did not permit a more in-depth elaboration on PE teachers’ perceptions, opinions, and experiences regarding the quality of CPD and school support. Consequently, it was important to conduct a second study (phase two) to gain more in depth understanding (case studies). It is important to clarify that the second study sought the experiences and perspectives of PE teachers working in Post-Basic education teachers. This was because relevant CPD policies in Oman explain that more CPD programmes are available to Post-Basic education teachers. It was therefore assumed that these teachers will have a wider range of CPD experiences to draw upon. The third study was designed to capture CPD providers’ perspectives; i.e. to listen to those with responsibility in designing and implementing various CPD programmes. This study would offer a different perspective on the existing CPD provision as experienced by those in a strategic role. A number of data collection tools were employed and these are outlined in the following section.

Figure 7: Three Phases of the Present Study





2.3. Data collection Tools

Choosing Arabic as the language to be used in the research instruments has both advantages and disadvantages. One advantage is that it prevents the participants from misunderstanding the questions. Participants can also express their views without fear of making mistakes, and they can talk fluently, much more so than if they speak in English. However, there are several disadvantages to using Arabic in the research instruments. For example, it requires more resources, because the researcher writes the survey and the questionnaire in English, then these are translated into Arabic; then, after the responses are obtained, these are translated into and analysed in English. It also makes it difficult to phrase the original speech of the interviewee to support the argument.

As mentioned previously, the aim of the present study was to collect data across three phases/studies, using a range of methods, which are summarised in table 1:

Research Studies	Participants /Sampling/ Process
Study 1	Whole PE population (n=499) Survey were distributed by ministry of education (technical office), then by WhatsApp application
Study 2	Teachers case study (n=11) Target population: PE teachers working in Post Basic Education Schools in Muscat *Purposive sampling *Three interviews with each of the nine teachers
Study 3	CPD providers case study (n=10) Target population: 10 *Purposive and snowball sampling *Single face-to-face interviews with 10 providers and follow up interview with 4 of these providers.
Note: there are more details about the participants/ sampling/ process of each study in chapter three, four and five.	

Table 1: Data collection procedures

2.4. Research Paradigms

A research ‘paradigm’ is defined as the researchers’ belief systems, assumptions and hypothesis, which shape the questions that researchers try to answer, as well as their data collection and analysis methods. It is more about what researchers think about the world (Lincoln & Guba, 1985) and gives researchers a clear framework or structure to conduct their study (Thomas et al., 2015).

There are various definitions in the literature, but many resonate with the belief that a research paradigm shapes the research process in fundamental ways and in each stage, including research principles, data collection and analysis, and choosing the sample (AL-

Lamki, 2009). In other words, a clearly articulated paradigm gives researchers a framework or structure to conduct their study (Thomas et al., 2015).

The process of selecting the paradigm that is appropriate for any research depends on the nature of the research and on the problem that researchers seek to examine. In the social sciences, four research paradigms are frequently discussed: positivism, post-positivism, critical theory, and constructivism. Choosing between these four paradigms depends on the researchers' understanding of the world and the nature of reality (i.e. ontology) and the nature of knowledge (i.e. epistemology) (Armour and MacDonald, 2012). The following sections provide brief descriptions of the four paradigms that dominate research into education and provide a rationale for the choice(s) made in the present study

2.4.1. Positivism

Positivism seeks to uncover the 'truth'. Through observation and other objective measures, the aim of the researchers is to capture the 'true' nature of reality. Positivism appears to underpin endeavours to discover the cause and effect of phenomena (Armour and MacDonald, 2012). Positivism is usually associated with quantitative methodology and statistical analysis, as researchers look for associations between different variables, or cause and effect relationships. Those undertaking research from a positivist perspective often claim that they seek to generate knowledge that reflects the true reality of the phenomenon under investigation. This often involves researchers seeking to control or predict variables in order to offer clear cause-effect explanations of phenomena. Furthermore, to do so 'objectively', they believe that they need to distance themselves from the 'objects' of inquiry (i.e. the research participants), and to minimise any interaction between the researchers and the participants (Ponterotto, 2005). Many argue that a positivist view is inappropriate in the field of education which involves humans, complex social phenomena, subjectivity, and real-life

experiences (Thomas, 2013). Therefore, given the research questions and taking into account these arguments, it was decided that the positivist paradigm would not be appropriate for this study.

2.4.2. Post-positivism

From a post-positivist perspective, the ‘truth’, and the one and only reality, can be apprehended differently by different individuals. When compared to positivism, post-positivism is closer to qualitative methods, because it concentrates on understanding the subject of any phenomenon in the world (Ponterotto, 2005). The primary goal of research, in this case, is to still uncover the ‘truth’ and ‘reality’, but there is acknowledgement that this ‘truth’ can only be apprehended imperfectly and probabilistically (Guba and Lincoln, 1994). The aim of the researcher in this context is to explore individual’s perceptions, views and experiences as a means of understanding the reality beyond those perceptions (Healy & Perry, 2000). This paradigm was therefore inappropriate for the present study, which sought to explore and interpret the research participants’ multiple, unique experiences that shaped what they believed about CPD.

2.4.3. Critical theory

From a critical theory paradigm, it is acknowledged that there are multiple realities which are situated in historical, social, and cultural structures. Researchers in this paradigm aim to get a deeper insight of what is happening in a particular situation (Thomas et al., 2015; Healy and Perry, 2000). Researchers who use this paradigm often use long-term ethnographic and historical approaches to *change* (rather than merely understand) organisational processes and structures (Thomas et al., 2015; Healy and Perry, 2000). This paradigm is also inappropriate

for the present study, as the present study does not seek to bring change but rather to explore understanding, knowledge, points of views and suggestions from different participants.

2.4.4. Social constructivism

In this paradigm, there is acknowledgement that there is no one reality only. To better understand the world, and the phenomenon under investigation, researchers need to examine the multiple realities of those concerned. Furthermore, these multiple realities are socially constructed. In other words, social constructivism believes that there is no one single reality; but there are multiple truths that are situated in specific contexts and particular belief systems (Healy & Perry, 2000). Researchers adopting this research paradigm are active participants in research fieldwork, because knowledge is produced through meaningful and in-depth interactions between the research participants and the researchers (Healy and Perry, 2000). Through this process, researchers are seeking to bring to the surface hidden, underlying meanings.

Social constructivism was an appropriate paradigm for the present study, because it is based on the assumption that the aim of research is to unpack and understand the multiple realities of those involved in complex social processes, such as educational processes. In the case of the present study, as previously discussed, the primary aim was to examine PE teachers and CPD providers' experiences, perceptions and views regarding the existing CPD system in Oman; and how they experience the system from their unique standpoint. Although a mixed methodological approach was employed, it was acknowledged that the aim of the process of collecting data, whether this was achieved via in-depth individual interviews or closed / quantitative survey questions, was to uncover the research participants' unique views and experiences, as perceived by them. It was also acknowledged that the student researcher

could potentially influence the process (so the knowledge produced was ‘subjective’), as explained in the following section.

2.5. Reflexivity

When adopting a constructivist approach, researchers acknowledge that there are multiple truths that need to be examined; and research participants need to be given the voice to express their views, opinions, feelings, perceptions etc. The researcher is heavily involved in the development and implementation of the research process. In the case of the present study, the student researcher could influence the development of data collection tools in fundamental ways; for example, by making decisions on the most appropriate research design and what questions to include in the survey and interview protocols. During the data collection process, the student researcher could also influence the direction of participants’ responses, as the researcher is the research instrument as far as interviewing is concerned. It was therefore paramount to consider and understand the ways in which the researcher could influence the process. Adopting a reflective approach was important.

Reflexivity is a methodological tool that enables researchers to ‘shift inwards’ and to engage in a critical elaboration of the various influences (personal, professional, biographical, social, cultural) they bring to the inquiry, drawing attention to how these affect the research process (Johnson, 2015, Maxwell, 2011). It is also a methodological tool that can assist researchers ‘better represent, legitimise or call into question their data’ (Pillow, 2003, p. 176). There are three ways that reflexivity of researchers could have an impact on the overall research process. These are when researchers: (i) share the experience of research

participants; (ii) move from the position of an outsider to that of an insider of the context of the study; and (iii) has no personal familiarity with research participants (Berger, 2015).

It is important to clarify that this study began in response to an enduring personal interest, an interest in how PE teachers can retain a continuous passion for teaching, with all the challenges and different circumstances each encounter, most of which are out of the teachers' control (e.g., hot weather, lack of facilities in schools, restrictive administrations). This interest in how PE teachers continue to learn once appointed was a meaningful question in the context of my own life. I taught in a primary school for one year during which time I became acutely aware of some of the challenges, even struggles, teacher face. Alongside some of the traditional challenges teachers typically face (e.g., classroom management, unsupportive administration, lack of confidence) (Louws et al., 2017b), there was also the issue, in my case, of experienced, established teachers not showing willingness to help and guide newcomers.

Despite working in Higher Education as a lecturer over the last nine years, I regularly designed and implemented CPD programmes for PE teachers. I was also in close contact with former colleagues and friends (using a popular social media platform and via informal discussions), so I knew how much they felt ignored and professionally neglected. It was clear that these professionals did not feel they get the support they need. In this context, I was aware of their efforts to try to support each other, by sharing lesson plans, warm-up 'fun' activities, different teaching methods, class management strategies. It was therefore evident that professional learning is happening but not in a formally recognised way. When I engaged in relevant readings, I started asking questions about the extent to which this

learning was ‘enough’ and what could be done to improve the existing situation. The seeds for this thesis were therefore laid, unknowingly, during this one year of my teaching in a primary school but was established when I realised, through engaging in the relevant literature at the start of my PhD journey, that understanding CPD as currently experienced by both teachers and CPD providers was an important first step to changing things.

During the data collection, and because of these experiences and understanding of PE teachers, I knew that my position as a research would fit under the first category as captured by Berger (2015). I perceived myself as an insider, one who had similar experiences (albeit brief) but also one who had a good understanding of how PE teachers felt and what they believed about CPD. This gave me the unique opportunity to establish good rapport with the participants (some of whom were colleagues I already knew) and understand their point of view. As previously noted, in qualitative research, researchers cannot separate themselves from the research process (Dwyer Buckle, 2009). This however also meant that I was in a powerful position to exercise ‘research bias’.

Research bias refers to the tendency of researchers to impose a priori theoretical frameworks or interpretations on the data, marginalise or exclude opposite or alternative perspectives, and draw unjustifiable inferences or generalisations (Schwandt 2001). To ensure that this was eliminated in the present study, and given that in qualitative research, there is an ‘active, sustained, and long-term involvement with the respondents’ (Schwandt 2001, P.15)., during the data collection, data was gathered with “eyes open”. I avoided any body language suggesting the agreement or disagreement of the experiences PE teachers shared; I probed them to further unpack and justify their thinking. In this way, I was trying to eliminate the

possibility of imposing my own interpretations in what teachers shared. It was therefore important to engage with the teachers in in-depth conversations and to declare that their opinions mattered. Their opinions would be analysed and inform the findings from this study (Dwyer Buckle, 2009).

2.6. Ethics consideration

Research ethics is a critical consideration in educational research. It concerns respecting all research participants through all research stages (Wolgemuth et al., 2015). Research ethics is not just about receiving permission to conduct research from an institute or organization; rather, it is the researcher's constant consideration of respecting research participants, ensuring their confidentiality and protecting their personal data. The present study was approved by the University of Birmingham Ethical Committee (see Appendixes A-E). The student-researcher also visited the Technical Office of the Omani Ministry of Education in order to obtain a permission letter to be able to access the schools and to meet CPD providers. According to ethical guidelines for education research (BERA, 2018), the following ethical considerations should be taken into account:

- Consent (at the begin of the study, participants' voluntary informed consent needs to be collected, after informing them about the purpose of the study and the nature of their involvement in the study. Participants' right for withdrawal, and the process for this, should also be made clear.
- Transparency ('Researchers should aim to be open and honest with participants and other stakeholders, avoiding non-disclosure unless their research design specifically

requires it in order to ensure that the appropriate data are collected', BERA, 2018, p. 22)

- Right to withdraw (Researchers should recognise the right for all participants to withdraw from the research for any or no reason, and at any time, and participants should be informed of this right. Researchers should always provide their own contact details to participants)
- Incentives (Researchers' use of incentives to encourage participation should be commensurate with good sense, such that the level of incentive does not impinge on the free decision to participate) (not applicable in the context of the present study)
- Privacy and data storage (The confidential and anonymous treatment of participants' data is considered the norm for the conduct of research)

All participants were informed thoroughly and truthfully about the overall purposes of the study via informal conversations and a formal letter (appendix F). Furthermore, all participants were informed that they had the right to withdraw from the research at any stage of the process. All their personal details and information / data provided would be treated in confidence (and anonymously in the case of the survey).

Specifically, in the first study, the cover page of the online survey included all details about the purpose of the study, what the participants have to do, how the information will be treated confidentially, withdraw conditions, and what will happen with the result. It was stated that by completing the survey, participants gave their informed consent to participate in the study. In the second study, it was very important to clarify the purpose of the study and the ability of the participant to withdraw from the study at any stage. Interviewed were audio recorded.

It was therefore important to explain and justify this to the participants; and to assure them for their confidentiality. This point was an important and sensitive one to consider, thoroughly explain to the participants, and adhere to, especially given that most of the interview participants were female teachers and from an Islamic society. The researcher believed that the teachers understood that their confidentiality would be respected, and were in a position to express their opinion freely. Similar ethical processes were followed in study 3 (CPD providers).

CHAPTER: THREE

STUDY 1: WHAT DO PHYSICAL EDUCATION TEACHERS THINK ABOUT THE NATURE AND QUALITY OF THE EXISTING CONTINUING PROFESSIONAL DEVELOPMENT PROVISION IN THE SULTANATE OF OMAN? RESULTS FROM A NATIONAL CPD SURVEY

3.1. Setting the scene

Every child deserves a high-quality educational experience (White, 2018). Research suggests that teachers need to participate in a wide range of Continuing Professional Development (CPD) opportunities to renew, extend and improve their practices in order to raise standards of student achievement in schools (King, 2014, De Vries et al., 2014). CPD is, however, a topic of enduring concern for the educational community. Although the value of CPD is increasingly recognised in policy (Society of Actuaries, 2009, 'Ministry of Education and the World Bank, 2014,') and research (Cordingley et al., 2015), fundamental questions remain about effective forms of provision.

CPD is a broad concept, encompassing professional learning experiences which are both formal (e.g., seminars, conferences, courses) and informal (e.g., collegial conversations, problem solving, reflection) (Richter et al., 2011). Results from large-scale surveys (TALIS, 2013) and systematic reviews (Day, 2014, Cordingley et al., 2015, Meissel et al., 2016, Yoon et al., 2007) indicate that CPD can transform practice and positively impact

on student achievement when it is sustained and taking place in the school context. However, although teachers often report valuing informal CPD activities (e.g., mentoring, peer-observation, and coaching) and are often highly critical of ‘traditional’ conferences and seminars (Bayar, 2014, TALIS, 2013), researchers caution that not all informal learning is ‘equally productive’ (Ronfeldt et al., 2015, p. 479). Therefore, despite a growing body of research, questions about what works for teachers and their professional development remain. Further research is needed to examine CPD policy and practice in various national contexts.

Research into the CPD provision for Physical Education (thereafter referred to as PE-CPD) is also accumulating and results seem to echo studies conducted within the wider educational CPD landscape (Makopoulou and Armour, 2011b, Makopoulou, 2018, Armour and Makopoulou, 2012, Armour et al., 2012, Elliot and Campbell, 2015, Sum et al., 2018, Souza, 2015, Yoon, 2017). Yet, overall, most studies are small-scale, originating in specific local or national contexts. In this context, it is important to remember Surgue (2004) comment that considerable variation in the ways CPD is interpreted, conceptualised and practiced by policy makers and CPD providers in different national contexts exists. So, there is a need for further research to be conducted in diverse national contexts in order to develop understandings about what CPD forms/opportunities teachers participate in and what they find effective. This knowledge can inform and develop current thinking and understanding of the various ways CPD is practiced in these diverse contexts (Makopoulou and Armour, 2011b).

Understanding teachers and PE teachers’ patterns of participation is an important field of inquiry. Learning pattern is defined as “‘a coherent whole of learning activities that learners

usually engage in” (van den Bergh et al., 2015, p. 143). It also includes teachers’ beliefs about own learning and their motivation to learn (ibid). Teachers’ learning patterns, research suggests, are influenced by the context in which they work (van den Bergh et al., 2015, Vermunt and Endedijk, 2011); and therefore understanding teachers’ diverse learning patterns can help to capture the differences in the way that teachers learn and the impact this learning has on their practices (Vermunt and Endedijk, 2011).

It is argued in this study that understandings teachers’ CPD patterns of participation is equally important in order to develop better understandings of the kinds of participation that are valuable and impactful for PE teachers in diverse national and local contexts. Since teachers are responsible for creating a meaningful learning environment that can have a positive impact on student learning (Meschede et al., 2017), it is also important to explore what teachers think about the available CPD opportunities; i.e. what CPD can encourage them to develop understandings and to subsequently improve teaching quality (de Vries et al., 2013a).

3.2. Study purpose

To address study one purpose which was the current knowledge gap on understanding PE teachers’ patterns of CPD participation, and to provide new evidence on the nature, quality, and effectiveness of the available CPD opportunities as perceived by Physical Education (PE) teachers in Oman. Specifically, the study sought to answer the following research questions:

- (1) In how many CPD opportunities do Physical Education (PE) teachers in Oman participate?

- (2) What are the perceptions of PE teachers in Oman about the importance and relevance of the existing state-funded CPD provision in Oman?
- (3) What are the perceptions of PE teachers in Oman about the existing CPD support in their schools?
- (4) What are the contributions can make to the accumulations of evidence base around CPD provision?
- (5) And how this is perceived by PE teachers themselves?

A cross-sectional design was adopted to address these questions quantitative data was collected via an online teacher survey. Though conducted in a specific national context, the study was grounded in and informed by the international literature on effective CPD. The study therefore sought to not only inform CPD policy and practice in Oman but also contribute to collective understandings about the nature of PE teachers' engagement in CPD more broadly. It was therefore intended for this study to make a contribution to the accumulation of evidence base around CPD provision (Darling-Hammond, 2016) and how this is perceived by the teachers themselves.

3.3. Literature Review

3.3.1. Effective CPD: formal, non-formal, informal

3.3.1.1 Formal, non-formal learning

The term Continuing Professional Development (CPD) is understood to involve formal' (e.g., seminars, conferences, workshops, and courses), non-formal (e.g., peer teaching, mentoring, observations), and informal (e.g., reflection, conversations) learning opportunities (Armour et al., 2017, Armour and Makopoulou, 2012). Formal CPD often

refers to any intentional, structured, externally organised opportunity, which leads to a formal qualification (Richter et al., 2011). Most of the decisions about the objectives, timing/duration, location and targeting group are made by the CPD providers (Richter et al., 2011). Non-formal CPD, on the other hand, includes a range of learning encounters that are intentional but not linked to formal qualifications. This might for example include teachers trying to solve a school-wide problem of lack of learning progression amongst disengaged pupils in PE through collaborative planning and sharing of expertise. Another example of non-formal CPD includes mentoring schemes being in place for newly appointed teachers (Chambers, 2014).

3.3.1.2 Informal learning

Unlike formal and non-formal, informal learning is unintentional. It can take place in various contexts, often without the realisation that learning actually takes place (Armour and Makopoulou, 2012, Darling-Hammond et al., 2017). This is evident, for example, when teachers reflect on why students did not appear to engage with a new game or approach (reflection-on-action, using Schon's terminology, (Schon, 1983). Another example of informal learning is when teachers engage in spontaneous collegial conversations to exchange ideas, share resources, or solve problems (Darling-Hammond et al., 2017, Armour and Makopoulou, 2012). In most case, the intention is to solve a problem or develop new ideas rather than to 'learn'; so, there is no intension to 'learn' as such.

3.3.1.3 Features of effective CPD

In recent decades, an increasing number of researchers seek to unpack and explain the features of effective CPD provision by 'measuring' the effectiveness of specific CPD

interventions. Being effective means having an impact on teacher or pupil learning outcomes. However, there is acknowledgement that in some cases, researchers only offer “sketchy details” (Timperley and Alton-Lee, 2008, p. 346), of the CPD programmes they seek to ‘measure’, so little is known about how and why the programme was designed, implemented in specific contexts, and worked or failed to work (Wayne et al., 2008). Another body of literature seeks to capture the perceptions and experiences of CPD participants as a significant indicator of CPD quality (Lunenberg et al., 2017). Relying on case studies or self-report surveys, researchers have begun to articulate the features of effective CPD and to identify the limitations in the ways CPD is organised and delivered (Armour and Makopoulou, 2012, Armour and Yelling, 2007, Darling-Hammond et al., 2009, Darling-Hammond and Richardson, 2009a).

As far as formal CPD opportunities are concerned, there is a degree of agreement that CPD is effective when it: (i) develops teachers’ knowledge of the subject (content-focus) and how pupils learn this subject (Darling-Hammond and Richardson, 2009a, Garet et al., 2001); (ii) engages teachers in practical, active and collaborative learning (Lunenberg et al., 2017); (iii) is sustained and continuous (De Paor and Murphy, 2018), with follow-up support (Darling-Hammond et al., 2017); (iv) is grounded in teachers’ practice (Kennedy, 2016); and (v) builds upon teachers’ prior knowledge and understandings (Patton et al., 2015). Finally, collective participation, when more than one teacher from the same school pursue the same CPD opportunities, is also considered an important element of effective CPD (Kennedy, 2016, Garet et al., 2001). Some of these features (e.g., active and collaborative learning) have strong theoretical grounds but the implementation of some of these principles are not always straightforward (Makopoulou and Armour, 2014).

Although accessing external expertise is a necessary and valued component of CPD, there are concerns that the design and delivery of formal opportunities are rarely grounded in a thorough understanding of professional learning (Darling-Hammond and Richardson, 2009a, Makopoulou and Armour, 2014). The traditional CPD course, often delivered in a form of a day-long workshop or course, has been criticised for failing to take into consideration teachers' diverse contexts, learning needs and prior learning (Patton et al., 2012). This is often the case because a 'transmission-oriented-approach is adopted (Armour and Makopoulou, 2012).

3.3.1.4 Debate on the effectiveness of formal, non-formal and informal learning

Although short courses such as workshop have been criticised for the 'artificial separation' of knowledge from practice, others view this separation as an opportunity to access unfamiliar perspectives and resources and to (re)view one's practice with fresh eyes (Darling-Hammond et al., 2009). It is also acknowledged that short courses, when done well (Patton and Parker, 2014) can play an important role in reaching and informing a large number of teachers and can be used successfully to provide networking (Muijs et al., 2010), new skills and content knowledge (Patton and Parker, 2014).

Non-formal and informal CPD opportunities are generally viewed favourably by teachers (Armour and Yelling, 2007), researchers (Armour et al., 2017, Stoll et al., 2012), and policy makers (DFE, 2010). This is largely the case because of the flexibility, convenience and relevance of these opportunities. Often taking place in the workplace, at a time convenient

to the teachers, and revolving around issues that teachers are concerned and worried about, informal learning is generally perceived to have a positive impact on teachers' knowledge and practice (Armour et al., 2017, van den Bergh et al., 2015, de Vries et al., 2013b, De Paor and Murphy, 2018).

Such informal and collegial interactions are believed to be effective because they enable teachers to support each other in improving their practice, especially when these conversations or interactions are conducted in an environment of 'trust' fostering teachers to engage in critical inquiry and reflection (Makopoulou and Armour, 2014). In other words, informal collegial interactions work when teachers raise issues, take risks, and address dilemmas in their own practice (Darling-Hammond and Richardson, 2009a). Researchers (Gore et al., 2017) have also argued that when teachers work together over time, they can generate much more in-depth understandings of the issues discussed (Darling-Hammond and Richardson, 2009a). They can also produce "collective knowledge which is more powerful than what individuals could achieve by working alone" (Makopoulou and Armour, 2014).

Within this overall positive climate, there is nevertheless increased recognition that informal learning is not a panacea. A number of 'weaknesses' or drawbacks in non-formal and informal CPD have been identified (Armour and Makopoulou, 2012). These include acknowledgement that meaningful, authentic and critical conversations amongst colleagues do not always take place due to a range of factors, including a prevailing restrictive school culture (Marsick and Watkins, 2015). As a consequence, the extent to which collegial informal interactions can indeed challenge existing – established – practices have been questioned for decades (Makopoulou and Armour, 2014, Little, 2002, Rogers et al., 2007,

Russell et al., 2001). In this context, there are also publications about the ‘best way’ to facilitate collegial learning that can have a meaningful impact on teachers’ knowledge and practice as well as pupil achievement (Makopoulou and Armour, 2014, Darling-Hammond and Richardson, 2009a).

In the context of these ongoing debates about the possibilities and challenges embedded in *all* different types of learning, from formal to informal, questions about the relative effectiveness of different CPD forms have been raised (Desimone, 2009). Asking whether one type of CPD form is more effective than another is not always the right question however. What is important is exploring the effectiveness of CPD as applied in different national or local contexts and experienced by teachers working in different schools and with different experiences and perspectives. Listening to and understanding what teachers in these diverse contexts have to say about the existing CPD provision, including formal and informal CPD (Desimone, 2009) is important in advancing current understandings. One such context with limited prior CPD research is the Sultanate of Oman.

3.3.2. The study context: Education and CPD provision in Oman

Education in Oman is state-funded and it is non-compulsory for its entire young people between the ages of six and 17. Known as Basic Education (BE) (and replacing the previous General Education since 1998-1999).

At the time of the research, BE in Oman had four broad aims:

- a) To ensure that every Omani child engages and participates in at least 10 years of compulsory (basic) education;

- b) To produce knowledgeable, highly skilled citizens who are adequately prepared to make a significant contribution to the workplace/society;
- c) To give equal educational opportunities to male and female children; and
- d) To instil Omani values and national pride through the ‘Omanisation⁷ programme’ (Issan and Gomaa, 2010, p. 23).

These aims were the result of the 1998-1999 educational reform during which time it was also acknowledged that raising educational standards in all schools was paramount. To raise standards, the reform acknowledged the need to improve the quality of teaching and learning, by introducing ‘innovative’ teaching and assessment approaches, improving facilities and other available educational resources (including the use of technology), reducing class sizes, and upgrading teachers’ qualifications and skills (Ministry of Education and the World Bank, 2014). To implement this reform, the Ministry of Education provided various CPD opportunities for teachers, designed and delivered by local and international experts (Al-Issa and Al-Bulushi, 2012).

In Oman, as in many other countries (Society of Actuaries, 2009; UKCP, 2015) the importance of CPD is increasingly recognised in policy documents (‘The Annual Education Statistics Book, 2016/2017, Annual Report of School Learning, 2014/2015’). This is grounded in a widespread belief that improving the quality of teaching, through engagement in meaningful, high quality CPD opportunities, can improve student outcomes; and ultimately a nation-state’s ‘economic competitiveness’ (Kennedy, 2016). This reasoning is

⁷ Omanisation it is a policy enacted by the government of Oman in 1998 aimed at replacing expatriate workers with trained Omani personnel

evident in CPD policy documents published by the Ministry of Education. However, CPD is also understood to be a tool to upskill teachers who have obtained fewer initial qualifications. This is particularly relevant to the Omani context, as some of the teachers who graduated from other institutions⁸ are not well prepared for teaching provision. For these teachers, CPD engagement can play a major role in ensuring that they remain abreast of developments in education and that they are prepared to respond in a positive way to ‘modern challenges’ such as student diversity, updating teachers in relation to educational objectives (curriculum provision) and national priorities, and supporting them to engage in ‘self-development’ (World Data on Education, 2010/2011, p. 23).

Since 2011, there are broadly two types of formal CPD opportunities available to teachers: (a) Centralised programmes and (b) Decentralised programmes. Centralised programmes are designed and delivered by the MoE. They are programmes that are specifically designed to engage various professionals in education, including supervisors, special education teachers and teachers teaching different subjects, including PE. Typically, the topics covered in these programmes relate to specific reforms initiated by the MoE. At the time of the research, and in the academic year 2016-2017, it was reported that a total of 136 centralised CPD programmes were implemented in the country ('Annual Report of School Learning,' 2016/2017).

⁸ Some of PE teachers in Oman graduated from universities overseas and some other smaller Universities in Oman, which follow a different undergraduate PE programme that is not aligned to the US standards.

Decentralised programmes, on the other hand, are typically designed at the local level, by the general directorates in the governorates⁹ and at the school level. This more recent move towards more decentralised CPD provision was important in order to reduce the burden on the MoE staff (The Annual Education Statistics Book, 2016/2017). Decentralised programmes also require fewer resources, as there is no funding requirement for teachers' travel cost or accommodation. The rationale for decentralised programmes was also based on the assumption that they would have a greater impact on teachers' practice ('Ministry of Education and the World Bank, 2014, The Annual Report of School Education, 2014/2015). Designed at the local level would enable providers to align what was on offer with teachers' needs, rather than what the MoE wanted teachers to learn. A total of 856 programmes across Oman were offered to teachers across all subject areas in 2016 (The Annual Education Statistics Book, 2016/2017).

In terms of the duration, most of these programmes lasted between three to five working days; and were designed and implemented by local supervisors from the directorate itself or from MoE (Annual Report of School Learning, 2014/2015). It is important to note that the MoE appears to be aware of some of the issues and limitations of existing provision. For example, it was recently reported that the existing CPD provision is not sufficient in supporting teachers to implement educational reforms and to update their teaching, including the use of digital technology (Issan and Gomaa, 2010). Furthermore, there is recognition that the available programmes are limited (Al-Higiri, 2017). As a result, and over the last decade, there were consistent calls to change the existing CPD system in place.

⁹ Governorates are the main parts in Oman, and there are eleven governorates which include (Ad Dakhiliyah, Ad Dhahirah, Al Batinah north, Al Batinah south, Al Buraymi, Al Wusta, Ash Sharqiyah north, Ash Sharqiyah south, Dhofar, Muscat, Musandam)

One way to improve state-funded CPD provision was the establishment of a Specialized Centre for the Professional Training of Teachers (SCPTT) in June 2014. This centre specialises in trainee teachers, school administrators and local supervisors or CPD providers. Examples of programmes designed and implemented by the SCPTT centre (and accredited by 16 International Universities) include: (i) the year-long programme designed for head teachers and their assistants; and (ii) the year-long programme targeting educational supervisors (Annual Report of School Learning, 2016/2017, The Annual Education Statistics Book, 2016/2017). It seems that the creation of this centre was based on the assumption that through the support they offer to administrators and supervisors, teachers will also benefit (Al-Higiri, 2017, SCPTT Report, 2015). It is also important to note that this centre also has addition responsibilities alongside teacher and CPD evaluation. This includes proposing mechanisms and effective approaches to support teacher CPD; and following up and analysing teachers 'performance in the field of education.

In line with international trends (Louws et al., 2017a, King, 2014, Gore et al., 2017), another important goal of this centre is to build vibrant schools who are professional learning communities (King, 2014, Annual Report of School Learning, 2014/2015). Contrary to other countries, however, where the school unit has been recognised as a cite for CPD for decades (Gore et al., 2017), in Oman, it was only recently and following the introduction of the specialised centre, that schools were recognised as playing a part in teachers' CPD. In this line with this new perception, funding was allocated to Omani schools to be able to offer in-house professional development and to support their teachers to learn in situ (The Annual

Report of School Education, 2014/2015). Schools are, furthermore, now acknowledged as being responsible for the implementation of educational policies (ibid).

Overall, the education and CPD system in Oman are in constant transformation. There is acknowledgement, however, that the existing state-funded CPD system in place has a number of limitations (Al Jabri et al., 2018). The implementation of the available programmes also appears to be difficult to monitor. It is thus unclear in what CPD teachers (and PE teachers) participate, what they find useful, relevant or effective, and how this participation impacts on their knowledge and practice. In this context, the present study was designed to answer some of these questions and it was the first of its kind in Oman. Before discussing the methods and results, it is important to see what we already know from the international research literature on teachers' patterns of CPD participation.

3.3.3. What do we already know about CPD from international teacher surveys?

Over the last two decades, policy makers internationally have raised concerns about the quality of CPD provision and have urged researchers to provide robust evidence on the patterns of CPD participation. As a result, large-scale surveys have been designed and administered in national but also international contexts. The most prominent survey is The Teaching and Learning International Survey, TALIS (2013), which provides evidence on the conditions of teaching and learning environments across different EU countries. The Cross-European survey, administered every five years, also includes important information on the patterns of CPD participation as reported by the teachers themselves, as well as their views on the effectiveness of existing CPD provision. Results from the most recent TALIS (2013)

publication suggest that the vast majority of teachers (89%) reported taking part in at least one day of CPD over the 18-month period prior to the survey administration. Informal dialogue to improve teaching was the activity pursued by 93% of the teachers, followed by “attending courses and workshops” (81%) and “reading professional literature” (78%). “Observation visits to other schools” (28%) and pursuing “Professional qualification programmes” (25%) were the least popular activities across TALIS’ countries.

In England, Opfer and Pedder (2010) designed and distributed a teacher CPD survey with the aim to understand how teachers and school leaders in England perceive the benefits and effectiveness of CPD. Results suggest that more can be done in terms of the number of CPD opportunities teachers can pursue (Opfer and Pedder, 2010). In terms of patterns of participation, 77% of the respondents reported participating in school-based workshops compared to 66% who reported pursuing out-of-school workshops and seminars. It was also reported that almost half of the teachers (52%) had taken part in some form of non-formal CPD, including monitoring, coaching, co-teaching or observing colleagues in the last 12 months.

In relation to teachers’ perceptions on CPD impact, TALIS data suggest that between 85% and 90% of teachers reported a positive (moderate to large) impact on their knowledge of the subject and its pedagogy because of CPD participation. Likewise, teachers reported a moderate or large positive impact (80-85%) on their practice of assessing and evaluating students. These overall large percentages of teachers reporting some form of impact from CPD participation suggest that teachers value pursuing such opportunities.

Even though Continuing Professional Development for PE teachers (PE-CPD) has attracted less research funding than CPD for other teachers (Armour and Yelling, 2004), the research evidence is accumulating and, overall, results seem generally consistent to those reported in the broader CPD literature. PE-CPD researchers have also raised fundamental questions about the features of effective/ineffective PE-CPD and the nature of existing provision. Although mostly derived by small-scale studies, there is evidence to suggest that most PE-CPD opportunities are traditional in form (Armour et al., 2017) with the one-size-fits-all approach dominating provision (Keay et al., 2018). There are also concerns that PE-CPD is of short duration with no meaningful follow-up in support (Keay et al., 2018).

Cross-sectional research, relying on PE teachers' surveys, also indicates that teachers find little benefit from attending one-shot programmes and complain that the content of the CPD activities offered to them does not always match their professional learning needs (Armour et al., 2008). More recently, Keay et al. (2018) reported that just over 50% of the 761 PE teachers who participated in a survey in England reported engaging in very little or almost no CPD in their entire teaching career. Although the sample was not nationally representative, this study provides a strong indication that for some PE teachers, formal CPD participation is not embedded in their professional lives.

Results from a national CPD survey conducted in Malta suggest that most PE teachers (65%) believed that the available CPD opportunities were limited; and only a third of the respondents (35%) were satisfied with the CPD opportunities available to them. In terms of the patterns of CPD participation, 95% of the respondents reported interacting informally with colleagues. Peer observation (66%) and joint teaching (64%) also appeared to be carried

out by a large percentage of Maltese PE teachers (Gatt, 2016). These PE teachers provided clear recommendations to improve the existing provision of formal CPD. These included grounding CPD provision in a sustained collaboration between the University of Malta and local sports bodies, which should be formally evaluated (Gatt, 2016). They also believed that CPD content should match teachers' needs and teachers should be able to choose the content of the programmes (Gatt, 2016).

Similar issues were identified by PE teachers in Cyprus. For example, PE teachers identified a wide range of meaningful and effective CPD activities, not just formal CPD (Hadjimatheou, 2017). These included learning through collaboration with colleagues, engaging in personal study using online resources and out of personal interest. (Hadjimatheou, 2017). In a similar study conducted in Korea, PE teachers believed that collaborative learning had the greatest positive impact on teachers' pedagogy (Yoon, 2017). In both these CPD studies, PE teachers reported that they were looking for 'something fresh' and both CPD providers and teachers in Cyprus admitted that the type of CPD that the Ministry of Education provided was old-fashioned compared to that in other countries which are constantly seeking to improve CPD provision by adopting modern and innovative approaches (Yoon, 2017).

3.4. Methodology

3.4.1. Research design and participants

The study sought to examine what do physical education teachers think about the nature and quality of the existing Continuing Professional Development provision in the Sultanate of Oman. In order to 'map the terrain' (Borko, 2004) of existing provision and to offer a clear

description of PE teachers' perspectives at the time of the research (rather than explore change over time), a cross-sectional design was deemed the most appropriate. The target population of interest was PE teachers working in state schools in Oman in both basic and post-basic level. According to The Annual Education Statistics Book, 2016/2017), approximately 1906 PE teachers worked in 1100 state schools and were all invited to be study participants.

To maximise the response rate, an agreement was reached that the survey would be distributed by the Technical Office (TO) of the Ministry of Education. More specifically, in September 2016, the TO approach the Regional Head of each of Oman's educational directorates in order to inform them about the purpose and importance of the national online survey and to seek support for its distribution. It was expected that this professional support, in the form of initial and follow-up emails encouraging PE teachers to complete the survey, would increase PE teachers' engagement with the study. The initial response rate was however very small ($n=20$). To recruit more participants, after consultation with local academics and researchers, it was decided to use one of the most popular social media in Oman (WhatsApp). The decision to use social media in the context of this study was grounded in the need to increase the number of the respondents (Beninger et al., 2014, Gelinas et al., 2017) also engage specific hard-to-reach populations, based in remote areas with limited internet access in the school premises.

Given the rise of user engagement with social media internationally, it is not surprising that platforms such as Facebook, Twitter, Instagram and WhatsApp are becoming popular for data collection by researchers across different disciplines (Gelinas et al., 2017). Whilst this

has many positive aspects (e.g., limited resources required), the available guidance on how to engage with these platforms effectively and safely are limited and only recently published (Gelinas et al., 2017). The ethics in the context of this study, ethical approval was obtained by the Ethics Committee of the University of Birmingham and all important considerations in relation to participants' privacy and anonymity (e.g., survey participants were not asked to provide any personal identifiable information at any point in the research process) were adhered to rigidly (Gelinas et al., 2017, Beninger et al., 2014). It was therefore not possible to identify who the respondents were and in which schools they worked.

Between November 2016 and April 2017, a total of 499 teachers agreed to participate in the study by completing the online survey. Although not all participants provided full responses in all the survey items, a decision was made to not exclude those with incomplete items from the analysis, as interesting information and correlations between the items completed could be explored. This however complicated, to some extent, the reporting of the results. Thus, please note that in each result reported, the number of teachers included in the analysis is clearly identified (n=279), (55.9%) teachers provided information on their gender and most of them were female (n= 198, 70.9%) (Male: n=81, 29.0%). In terms of the type and level of education, the sample was relatively equally distributed and consisted of teachers working in first cycle (n=88, 33.0%) and second cycle (n=102, 38.3%) of Basic Education, as well as Post-basic (n=76, 28.5%) schools (total number of teachers answering this question, n=266, 53.3%).

The mean age of the participants was 32 (SD=8.4) (minimum 22 and maximum 51 years of age) but this information is on the basis of 137 teachers who completed this item (325

teachers did not provide this information and this represents 65% of the total sample population). There was significant variation in terms of the regions in which participants lived and worked. The region with the highest participation rate was region A (n=81, 27.1%), which was Ad Dakhiliyah, followed by 62 (20.8%) teachers from Muscat. The lowest response rates came from Dhofar and Al Buraymi (n=20, 6.7%).

3.4.2. Main data collection tool: An Online CPD Survey

The main data collection tool, as previously noted, was an online CPD survey. The decision to collect evidence through an online survey was grounded in theoretical (i.e. sampling) and practical considerations given the available resources. The use of an online tool enabled the research team to invite all PE teachers to be study participants because it required minimal resources to develop, pilot and distribute. Participants were given the flexibility to complete the survey anonymously at a time and location convenient to them (Thomas et al., 2015a). As previously noted, data were subsequently easy to access and to retrieve without any risk of revealing the participants' identity.

The survey consisted of four main parts (see Appendix A). All these parts were chosen based on some issues (quality, availability, school support of CPD) around CPD from literature reviews as well as from Omani context. Part One - Participant demographics (8 items); Part Two - CPD participation (3 items); Part Three - Perceptions on CPD quality and effectiveness (3 items); and Part Four - School support (4 items). The survey consisted primarily of Linkert scales and this approach was employed in order to collect evidence on, summarise and compare teachers' view on a given question or statement (Jamieson, 2004). It is important to acknowledge that Linkert scales do not provide research participants with

the opportunity to share and articulate their opinions, experiences or perceptions (Cohen et al., 2007, Christensen et al., 2011, Thomas et al., 2015b). However, a decision was made to include only Linkert scales to ensure that the time needed to complete the survey was reasonable. Also, the primary goal of this study was to ‘quantify’ teachers’ responses. Study 2 (following chapter) was designed to gain in-depth data on teachers’ experiences.

In part one, more specifically, teachers were asked to provide a range of demographic information allowing for comparisons to be made between teachers according to length of experience, type of school, region, gender, and professional / teaching qualifications. In part two, PE teachers were asked to identify the total number of CPD activities they engaged in last five years (item one) and types of CPD activities they engaged in over the last five years (item two). A list of five different types of CPD activities were provided (i.e. workshops, conferences, peer visits, peer assessment and team teaching) and this list was created on the basis of the available CPD opportunities evident in relevant policy documents in Oman and following discussions with PE supervisors and CPD Stakeholders from the Department of Education in the Sultan Qaboos University (SQU).

In part three, PE teachers were asked to share their overall perceptions on the nature and quality of the available state-funded CPD opportunities. Specifically, three items were included, seeking PE teachers’ views on the extent to which: (i) they were satisfied with the quality of CPD activities they engaged in over the last five years; (ii) CPD activities, as experienced by them, were relevant to their professional learning needs; and (iii) their CPD participation has had an impact on their teaching practice. A 5-point Likert scale, ranging from 1 – not at all satisfied / not at all relevant / no impact at all to 5- totally satisfied / very

relevant / significant impact, was employed. Please note that number 3, the middle option, was referred to as neutral which enabled respondents to neither agree nor disagree when they felt they were ‘in the middle’ with the statements in the survey’ (Likert, 1932).

In response to the heightened importance placed on school-based CPD, both internationally (Hardy and Melville, 2013, Opfer and Pedder, 2010, OECD, 2009) and nationally (World Data on Education, 2010/2011), the fourth part of the survey sought to collect evidence on PE teachers’ views on the nature and quality of CPD support offered in their schools. Teachers were asked to indicate the extent to which they agreed or disagreed with five statements which revolved around: (i) the support they believed they had to participate in school-based CPD (e.g., ‘My school regularly provides opportunities for me to participate in CPD activities’); (ii) the extent of the available school support to participate in different CPD programmes in multiple contexts (e.g., ‘My school encourages me to participate in different CPD programme outside school environment’); and (iii) the nature and quality of support afforded to them in the school environment to implement new knowledge into practice (e.g., ‘My school encourages me to apply what I have learnt on my teaching practice’). As in previous parts, a 5-point Likert scale (1 – totally disagree to 5 – totally agree) was employed to answer this question.

3.4.3. Validity and reliability

The online survey was developed in English and translated into Arabic. It was distributed to PE teachers online, using “Lime Survey”, which is an accredited software programme provided by the University at the time of the research project took place. The survey was developed through a collaborative process between the author and key CPD stakeholders in

Oman, including a PE supervisor, two PE teachers, and four assistant professors from a range of departments (i.e., psychology, physical education, curriculum and instructional methods) in the main university in Oman. This collaboration provided useful and constructive feedback that shaped the ways some questions were worded. For example, activities such as professional networks, peer observations, and joint teaching included in section two of an earlier draft were removed following their advice, as they are not common CPD activities in Oman. These were replaced by what these key stakeholders identified as the most commonly accessible CPD activities such as peer visit, peer assessment, and team teaching in the specific context of CPD in Oman. It was therefore important to ensure that the survey was easy to complete and that all items were meaningful in the specific national context. It is also important to clarify that the initial items were developed by drawing upon and modifying international surveys, such as the TALIS survey and a local survey from Al-Lamki (2009) Ph.D. thesis.

In terms of the survey's reliability, referred to as the extent to which results are consistent and repeatable (Yoon and Armour, 2016), 10 PE teachers were asked to complete the survey at two different points in time, two weeks (18 days) apart as recommended by research (Brownson et al., 2004). Cronbach's Alpha analysis was conducted to examine the relationship and mean difference between the ratings made by the same teachers at the two points in time. The results revealed that the tool was reliable ($0.813 > .07$). In some cases, more than one item was grouped together to run some correlations. For example, the three statements that relate to teachers' perceptions on the quality of the existing CPD provision, i.e., satisfaction, relevance, and impact, were grouped together for the purposes of this analysis. Cronbach's Alpha test was run and showed that these three items were reliable

(.783>, 07) and could be grouped together for further analysis. Similarly, the five statements related to teacher' perceptions on school-based support was also reliable (.908>, 07).

3.4.4. Data analysis

Quantitative data were analysed by using descriptive, frequency, correlation and spilt file features in SPSS. In more detail, descriptive statistics were run to describe and explore the basic features of the data in the survey and to provide simple summaries of the available evidence. Frequency analysis was also used as a descriptive statistical method in order to show the number of occurrences of each response chosen by the respondents. Finally, correlation analysis was also run to examine the extent and direction of relationship between two or more variables (e.g., perceptions on the quality, relevance with the number of CPD pursued).

3.5. Results

Results are reported in this section under four themes: (i) CPD participation as reported by these teachers, especially in relation to the quantity and frequency of CPD participation (Theme 1, section 2.5.1); (ii) PE teachers' perceptions on CPD quality and its impact on practice (Theme 2, section 2.5.2); (iii) teachers' perceptions on the nature and the quality of school-based CPD (Theme 3, section 2.5.3); and (iv) evidence from correlational analysis between different variables (Theme 4, section 2.5.4).

3.5.1. CPD participation: quantity and frequency

Descriptive statistics are reported in Table 1. Results suggest that, on average, these teachers pursued just under three CPD opportunities over the last five years, which equates to less

than one CPD per year. Female teachers appeared to participate in more CPD activities ($M=3.01$, $SD=2.88$, $n=65$) than males ($M=2.32$, $SD=1.90$, $n=25$). Results also suggest that teachers working in the post-basic schools (grades 11-12) participated in more CPD activities ($M=3.42$, $SD=2.36$ and $n=28$) compared to teachers of grades 1–10 with the mean score 2.78, ($SD=3.13$ and $n=28$). The number of years' experience appeared not to influence the number of CPD opportunities pursued, as teachers new to the profession (with less than nine years of experience) reported attending slightly more (but almost equal number of) CPD ($M=2.98$, $SD=2.86$, $n=50$) compared to teachers working in schools for more than 10 years ($M=2.77$, $SD=2.78$, $n=36$). Interestingly, teachers who graduated outside Oman ($M=3.36$, $SD=2.40$, $n=22$) appeared to participate in more CPD compared to those who graduated from Omani institutes ($M=2.57$, $SD=2.68$, $n=71$).

In terms of CPD type, the most popular CPD activity pursued by the respondents was team teaching ($n=133$, 26.7%) followed by peer visits ($n=113$, 22.6%). In turn, activities such as workshops ($n=90$, 18.0%) and conferences ($n=10$, 2.0%) were attended by fewer teachers over the last five years. This result suggests that even though team teaching appeared to be the most popular activity, this was again an activity reported being pursued by just under 30% of the teachers participating in this survey.

Table 2: Descriptive statistics on the number of CPD programme that teachers participated in last five years

Number of programme		Overall Gender		School type			Teachers' experience		University	
		Male	Female	Cycle (1)	Cycle (2)		+10	-9	Outside	Inside
M	2.82	2.32	3.01	2.78	2.47	3.42	2.77	2.98	3.36	2.57
SD	2.31	1.90	2.88	3.13	2.40	2.36	2.78	2.86	2.40	2.68
N	197	25	65	28	34	28	36	50	22	71

Note: second column illustrated the mean, number, standard deviation of the total CPD programme in last five years. Mean are out of 5

3.5.2. Perceptions on CPD quality

Results suggest that teachers overall were relatively satisfied with the existing CPD provision with the mean score in the relevant question just above the mid-point ($M=3.22$, $SD= 1.09$, $n=215$). A breakdown of the frequencies of these responses suggested that the teachers were split in their views, but with a higher percentage of teachers reporting satisfied (i.e. selecting a level of four or higher on our 5-point

scale) ($n=87$, 40.4%) compared to those claiming that they were dissatisfied (i.e. selecting a level of 1 or 2 on our scale) ($n=52$, 24%). 35% ($n=76$) were neutral (point 3 on scale). Although it could be argued that there are some positive elements in this result.

When asked how relevant to their needs the existing CPD provision was, the overall mean score was slightly above the mid-point ($M=3.69$, $SD=1.27$, $n=216$). An analysis of the frequencies of the teachers' responses suggests that the issue of CPD relevance is not a concern for 56% of the respondents who either agreed or strongly agreed with the statement on "Was that programmes that you attended relevant to your work" ($n=122$ and 24.4%). Just over 17% ($n=37$) held the opposite view, and a fair number of respondents ($n=57$, 26.3%) were neutral; in the mid between agreement and disagreement.

Regarding the impact on teaching practice, almost half of the respondents ($n=101$, 46.9%) agreed or strongly agreed that participation in different CPD activities could have an impact

on teaching practice. However, just over 20% (n=48) did not believe in the potential of CPD to positively influence teaching practice. The rest of the teachers (n=66, 30.6%) appeared to be in the middle (not positive and not negative either). Descriptive statistics on teachers' responses on all three items that relate to their perceptions on CPD quality are reported in Table 2. Teachers' responses per item are presented on the basis of their gender, school type, years of experience (less than and more than nine years in the profession).

Table 3: Teachers' perception on CPD quality in last five years (all five items).

		overall Overall	Gender		School type			Teachers' experience		University	
			Male	female	Cycle (1)	Cycle (2)	Post-basic	+ 10	-9	Outside	inside
Satisfaction	N	215	65	141	64	72	55	89	113	33	170
	M	3.22	3.05	3.31	3.30	3.12	3.18	3.29	3.18	3.58	3.16
	SD	1.09	1.09	1.12	1.06	1.12	1.15	1.60	1.09	1.14	1.11
Relevance	N	216	65	141	64	73	55	89	114	34	170
	M	3.69	3.62	3.79	3.55	3.70	3.91	3.72	3.73	4.00	3.68
	SD	1.27	1.19	1.33	1.36	1.36	1.12	1.28	1.32	1.25	1.30
teaching practice	N	215	65	141	64	72	55	89	113	33	170
	M	3.45	3.31	3.54	3.45	3.36	3.55	3.36	3.54	3.79	3.41
	SD	1.26	1.26	1.30	1.30	1.32	1.23	1.27	1.31	1.34	1.27
Note: these figures illustrated Programme quality according teachers' perception, mean score are out of 5											

3.5.3. Perceptions on the nature and quality of school-based CPD

Teachers were conscious about the extent to which they were satisfied with school-based CPD opportunities. In general, the majority of the teachers reported a moderate level of school support for participation in CPD programmes (mean score between 3.0-3.30). More specifically, the number of teachers who agreed that schools encourage them to participate in different CPD programmes regularly (n=71, 35.5%) was roughly equivalent to those who disagreed (n=74, 37%). The remaining teachers neither agreed nor disagreed (N=55, 27.5%). In addition, the majority of the teachers agreed that (n=87, 43.5%) CPD opportunities inside the school were greater than those offered outside of their school (n=75, 37.5%). Eighty-three teachers agreed that schools encouraged them to apply what they learned from CPD in their daily teaching practices (41.5%), while around 53 teachers appeared that their school is not supporting them to apply what they have learned (26.5%). 64 (32%) were neutral about this matter.

Regarding the facilities provided by schools to teachers, almost the same number of teachers agreed (n=65, 32.5%) as disagreed (n=67, 33.5%) regarding the facilities (courts. Library sources, equities) that were provided by schools, and around 68 teachers were neutral (34%).

Table 4: School-based CPD

		Overall	Gender		School type			Teachers' experience		University	
			Male	female	Cycle (1)	Cycle (2)	Post-basic	+ 10	-9	Outside	Inside
Participate Regularly	N	200	61	131	59	69	50	80	107	31	158
	M	3.06	2.87	3.15	2.95	2.87	3.38	3.02	3.09	3.03	3.07
	S.D	1.28	1.21	1.34	1.25	1.41	1.19	1.26	1.34	1.37	1.31
Inside School	N	200	61	131	59	69	50	80	107	31	158

	M	3.30	3.0 7	3.4 2	3.14	3.16	3.5 6	3.2 8	3.3 4	3.5 5	3.2 6
	S D	1.29	1.1 6	1.3 8	1.27	1.43	1.2 4	1.2 9	1.3 5	1.2 6	1.3 4
Outside school	N	200	61	131	59	69	50	80	107	31	158
	M	3.13	2.9 5	3.2 2	3.03	2.99	3.3 6	3.0 7	3.2 0	3.1 6	3.1 3
	S D	1.30	1.2 5	1.3 5	1.29	1.50	1.1 3	1.2 9	1.3 5	1.3 6	1.3 3
Implementatio n	N	200	61	131	59	69	50	80	107	31	158
	M	3.28	3.1 0	3.3 7	3.31	3.06	3.5 0	3.2 5	3.3 3	3.6 1	3.2 3
	S D	1.28	1.1 7	1.3 6	1.32	1.29	1.3 5	1.3 2	1.3 0	1.2 5	1.2 3
Facility	N	200	61	131	59	69	50	80	107	31	158
	M	3.00	2.8 2	3.2 8	2.88	3.04	3.0 4	2.9 6	3.0 7	3.1 3	2.9 7
	S D	1.23	1.2 0	1.0 8	1.32	1.36	1.1 2	1.2 1	1.2 9	1.2 8	1.2 6
Note: these figures illustrated school based-CPD according teachers' percipience. Mean are out of 5											

3.5.4. Correlations

When examining the links between teachers' perceptions on the quality of the available CPD (e.g., satisfaction, relevance and impact) and the number of CPD they reported pursuing, results suggest that there was no correlation between these two variables ($r=.001$, $n=63$, $p>.05$). This means that no matter what the teachers' perceptions were about the quality of CPD, this did not influence the number of CPD they engaged in. Similarly, when examining the links between teachers' perceptions on school-based CPD (all five items together) and the number of CPD they reported pursuing, results also suggested that there was no correlation between these two variables ($r=.098$, $n=59$, $p>.05$).

It is interesting to note that the items on teachers' perceptions about CPD quality (satisfaction, relevance and impact) and teachers' perceptions of school-based CPD (all five items together) were correlated ($r=.560$, $n=200$, $p=0.000$). This means that when teachers had positive views about school-based, they also had overall positive views about the quality of CPD; and vice versa. Results also suggested that teachers' views were not correlated to the number of years they were in the profession. This means that there was no clear pattern to indicate that newer or more experienced teachers had certain common views about the quality of CPD ($r=0.31$, $n=209$, $p>0.05$) and school-based CPD ($r=0.18$, $n=193$, $p>0.05$).

3.6. Discussion

Results reported in the previous section identify three major issues that deserve further elaboration and analysis. These include: (i) plausible explanations for the level and frequency of CPD participation, as it was evident that teachers did not pursue as many CPD opportunities as anticipated in the policy documents; (ii) teachers' mixed thoughts on the existing CPD provision, as the responses were split ranging from highly satisfied to not satisfied at all; and (iii) teachers' views on the support they experience from their school. Evidence suggests that teachers in Oman pursued a limited number of CPD activities over the course of the last five years, with an average of less than one CPD opportunity per year. This level of CPD engagement is substantially less than what is anticipated in CPD policy documents ('The Annual Education Statistics Book, 2016/2017,'). Thus, an important finding from this study is that although CPD policy in Oman concedes the importance of CPD and the need for teachers to participate in formal CPD programmes on a regular basis, the PE teachers who completed the survey reported engaging in fewer opportunities. The design of the study did not permit a more in-depth elaboration on why

this limited CPD participation was evident. It could be the case that the available opportunities are limited (contrary to policy ambitions), possibly as a result of recent budget cuts as a result of the financial crisis¹⁰. Another potential reason could reside with the PE teachers themselves and their motivation to pursue or opt out from the available opportunities.

Previous research suggests that the cost of CPD could be among the most significant factors hindering teachers from participating in CPD, even though they may recognise their value (Armour and Yelling, 2004, De Paor and Murphy, 2018, Tripp, 2004, TALIS, 2013). However, In Omani context, the cost might not apply as a factor hindering CPD participation, as a number of nationally and locally run programmes are supposed to be on offer free of charge from the government. However, as previously noted, the monitoring of what CPD is actually being implemented is not done in a robust way. This means that fewer programmes than planned might run or that the programmes have a small number of teachers enrolled. Monitoring CPD design and implementation is therefore an important recommendation in order to ensure that the available CPD funding is used appropriately.

Another potential reason for this apparent policy-practice gap could be that the available programmes were of poor quality. This means that these PE teachers opted out from more regular and systematic CPD participation as a result of their negative views on what CPD was on offer, how well (or not) programmes were designed, or whether these were appropriately targeted. It has been reported that teachers often turn their backs on any CPD

¹⁰ Oman public finance rely on oil revenues which around (76%) of public revenues. However, since 2014 Oman has suffered from financial crisis because of the oil price collapsed.

activities that do not have a positive impact on their knowledge and practice; or that they fail to address their needs (van den Bergh et al., 2015). CPD researchers have consistently argued in that context that CPD provision needs to be of high quality to increase teachers' motivation to participate (Lessing and De Witt, 2007).

A number of studies have underlined the importance of relevance, as one of the most important features of any successful CPD programme (De Paor and Murphy, 2018, Kyriakides et al., 2017). Results from the teacher survey of the present study suggested that less than 20% of the teachers were clearly dissatisfied with the lack of relevance of the available CPD; and that 56% believed that the existing CPD programmes were relevant. Results from correlational analysis also suggested that there was no significant correlation between the number of CPD teachers reported pursuing and their perception on the quality and school-based CPD. This means that teacher' perceptions about the quality and school-based CPD did not influence the number of CPD they have pursued.

The other factors that might influence teachers' CPD participation might relate to demographic characteristics, such as their gender or years in the profession. In fact, the possible link between the level of CPD participation and teaching experience has already been discussed in the literature (Makopoulou and Armour, 2014, Slingerland et al., 2017), with mixed findings reported (Kyndt et al., 2016, Louws et al., 2017b). In the present study, PE teachers with more than 9 years in the profession seemed less likely to participate in CPD compared with teachers who were new to the profession. This finding corroborates the results from previous studies, which indicated that participation in a

variety of professional development or motivation programmes declines as teachers acquire more experience (Day et al., 2007, Richter et al., 2011, Louws et al., 2017b).

Another study by Richter et al. (2011) demonstrated that there was a negative curvilinear relationship between age and in-service training (workshops, seminars). It appeared that, in the early stages of their careers, teachers had low levels of participation in activities. However, participation appeared to peak mid-career, before declining again in the latter stages of their careers. However, this study contradicted this (Louws et al., 2017b), as no variety in terms of how much CPD teachers pursued at different career stages was identified. After examination of the relevant literature, it is difficult to draw a clear conclusion about, or explain why some novice teachers in Oman seemed to participate in more CPD than experienced teachers. The clear finding is that future CPD designers and policy makers need to monitor CPD participation robustly and to examine whether participation is influenced by the years of experience or not. If that is the case, more tailored CPD programmes can be designed to ensure that all teachers remain engaged in ongoing CPD, both formal and informal.

The type of school in which teachers worked, whether they were teaching in basic or post-basic education schools, appeared to be correlated to the number of CPD they reported pursuing. Specifically, results suggested that teachers working in basic education attended, on average, very few CPD activities over the last five years, whereas teachers in post-basic education engaged in more. A plausible explanation for this result relates to the fact that PE is an examination subject in Post-Basic schools but this is not the case in basic schools. This might mean that PE teachers in post-basic education have greater accountability and pressure

to demonstrate improved student achievement in PE. This could, in turn, be a factor that drives them to pursue more CPD. Equally, it could be the case that more CPD is organised for teachers responsible for examination subjects (Van Veen and Kooy, 2012, Louws et al., 2017c).

Evidence suggests that the level of teachers' satisfaction with the opportunities currently available was mixed. Equally, some teachers responding in the survey believed that participating in CPD might have a positive impact on their teaching practices; but this was not the case for all teachers. Teachers also seemed that they participated in CPD programmes which were relevant to their needs, but also this finding was not applied for all teachers. There for, the results regarding the quality of CPD were mixed.

CPD is recognized as an important tool to support professional learning (Kasprabowo et al., 2018). However, it has been argued that CPD should be considered as 'a long-term process of development' (Kasprabowo et al., 2018, p. 124). This includes regular and carefully designed experiences, implemented systematically with the aim to promote growth and development in the profession (Kasprabowo et al., 2018). However, evidence from this study suggests that teachers' experiences are mixed; some believed that the existing CPD provision was relevant and impactful; while others did not. This finding is in line with previous CPD and PE-CPD research in other countries (Makopoulou and Armour, 2011b, Armour et al., 2017, Gatt, 2016, Hadjimatheou, 2017) and suggests that there is scope for improving what is available to PE teachers currently.

It is acknowledged that the survey administered in the present study only sought PE teachers' perceptions and beliefs. It is thus limited in simply reporting what teachers believed rather than it actually happened following CPD participation. To what extent do PE teachers in Oman develop new understandings following CPD participation? How does this participation support PE teacher to change their provision in a way to support more meaningful pupil learning and in line with contemporary conceptualisations of teaching and learning? These important questions can only be answered if robust evaluation processes are put in place (Makopoulou and Armour, 2011a, Louws et al., 2017c, Armour et al., 2017). This is a frequent recommendation found in publications internationally, but it is also something that is discussed in Oman. The challenge is to find cost-effective ways to not only establish whether teachers are satisfied or not with various CPD programmes but also to evaluate what teachers learn as a result and how they change their practices (Louws et al., 2017c).

As far as school-based CPD participation is concerned, results from this study revealed that provision was unequal in terms of the opportunities provided by schools to engage in CPD. In the results, teachers reported that their schools provided one opportunity per year. Results also suggested that the important role of school-based CPD could be further capitalised. In Oman, for example, even though schools are obliged to provide CPD for teachers, the results of this study were mixed as teachers were overall not highly satisfied with school-based CPD opportunities. Interestingly, almost the same number of teachers reported positive and negative views about school-based CPD. This variability in teachers' responses suggests that it is important to ensure that all schools offer useful, relevant and impactful CPD to their staff. Even though most researchers discuss the importance of

schools in providing the right support for teachers to engage in various CPD forms (Voelkel and Chrispeels, 2017), it is also acknowledged that the way schools support teachers' CPD might vary. Some schools offer an expansive learning environment, which involves 'substantive learning opportunities, with teachers encouraged to reflect more widely on what they are learning' (O'Leary, 2013, p. 350). Schools however might also be restrictive. This is when practitioners have limited opportunities to 'access learning', with professional learning endeavours being rushed and not valued (O'Leary, 2013, p. 350) (For a more detailed account of what an expansive and restrictive environment looks like, please see figure 8, (Fuller and Unwin, 2011).

So, how much teachers learn is determined to a large degree by the opportunities provided in and by their school. Teachers who have more time allocated to professional learning, for example, or have opportunities to work with others on projects or to solve problems (Hoekstra and Pederson, 2018), they are more likely to grow throughout their career (Armour et al., 2017, Bayar, 2014), and encourage meaningful collaboration (Hoekstra and Pederson, 2018, Darling-Hammond and Richardson, 2009a, McMillan et al., 2016).

<i>Expansive</i>	<i>Restrictive</i>
Participation in different communities of practice is encouraged – job/team boundaries can be crossed	Participation restricted to immediate work team/area – boundary crossing discouraged
Primary community of practice has shared 'participative memory'	Primary community of practice operates without reference to cumulative expertise
Vision of workplace learning – career progression	Short-termism – get the job done
Recognition of and support for workers as learners – newcomers (including trainees) given time to become full members of the community	Workers seen only as productive units – fast transition from newcomer/trainee to fully productive worker
Workforce development used as vehicle for aligning goals of the organization and of the individual	Workforce development used only to tailor individual capability to organizational goals
Skills widely distributed though workplace – multi-dimensional concept of expertise	Polarized distribution of skills – knowledge/expertise regarded as being confined to key workers
Planned time off-the-job for reflection and deeper learning beyond immediate job requirements	All training on-the-job and limited to immediate job requirements
Managers given time to support workforce development and facilitate workplace learning	Managers restricted to controlling workforce and meeting targets
Workers given discretion to make judgements and contribute to decision-making	Discretion limited to key workers – no employee involvement in workplace decisions

Figure 8: Characteristics of workplace as learning environment (Fuller and Unwin, 2011, p. 52)

3.7. Conclusion

In conclusion, the primary aim of this paper was to provide an overview of what physical education teachers think about the nature and quality of the existing Continuing Professional Development provision in the Sultanate of Oman. The key findings were that teachers in Oman pursued a limited number of CPD activities over the course of the last five years. Moreover, they believed that participating in CPD might have a positive impact on their teaching practices and they overall were relatively satisfied with the existing CPD provision. Regarding school-based CPD, the majority of the teachers reported a moderate level of school support for participation in CPD programmes. However, the results of this study were mixed. Therefore, Future research should seek robust evidence of the impact of specific CPD initiatives on both teacher and pupil learning outcomes and consider the fundamental questions regarding effective/ineffective CPD opportunities. Nevertheless, although variations in the frequency of the school-based CPD offered by different schools were identified, it appears that a clear national strategy is needed to guide schools on the nature and frequency of CPD offered to all teachers, because they are considered the cornerstone of the education system. CPD policy development in Oman needs to take advantage of the wealth of information that research has provided in the last few decades to provide a clear and shared conceptual understanding of what professional development is and to have a clear plan in place to monitor implementation and impact. They should also take better advantage of this research to elevate the quality of professional development studies and, subsequently, to elevate our understanding of how best to shape

and implement teacher-learning opportunities (Desimone, 2009) in a way that is relevant and applicable to the Omani educational and CPD contexts.

CHAPTER: FOUR

STUDY TWO: VOICES NEEDED TO BE HEARD: A QUALITATIVE EXPLORATION OF PHYSICAL EDUCATION TEACHERS' PROFESSIONAL LEARNING EXPERIENCES IN POST-BASIC SCHOOLS IN MUSCAT

4.1. Introduction and study purpose

‘Continuing Professional Development [CPD] is a key process within the wider agenda of raising standards and increasing societal growth capacity by improving policy and practice in ... education’ (Evans, 2008, p. 35).

Although the notion of Continuous Professional Development (CPD) has evolved over the last three decades, it is now considered a broad concept referring to a continuous, career-long process of professional learning (Muijs and Lindsay, 2008, Wells, 2014, Kasprabowo et al., 2018). Professional learning is no longer a private matter but should be made part of every teacher’s working life (Solmazand and Aydin, 2017, Prestridge, 2019). CPD, as a tool for professional learning, is often considered a powerful way for teachers to deepen, extend and even renew (i.e. transform) their practice (Day and Sachs, 2004). Indeed, giving teachers the opportunity to participate in different CPD opportunities in order to access new ideas, exchange experiences and reflect on their work is a fundamental component for school improvement and progress (Vangrieken et al., 2017). CPD as understood in the context of the present study is not confined to a specific form of activity. Rather, CPD involves multiple

learning activities, including both formal and informal, and which teachers pursue in order to continue to grow as professionals (Grosemans et al., 2015).

The way CPD is understood at the level of educational / CPD policy is important because this understanding sets the framework upon which developments at the level of CPD practice / implementation take place. CPD is defined differently in different national policy documents (Kennedy, 2007, Makopoulou and Armour, 2011b, DFEE, 2001, DFE, 2010, Desimone, 2009, Gatt, 2016). At the same time, the way CPD is understood at the level of educational / CPD practice is also inevitably open to varied interpretations and responses at the local level. For example, research shows that wider contextual factors (e.g., school structures and cultures) exert a considerable influence over teachers' professional learning (Louws et al., 2017b, Day and Gu, 2007). Equally, it is also understood that teachers engage in CPD in diverse ways; and what they take out of the experience, whether formal or informal, is also different (Day and Sachs, 2004).

Over the last decades, research examining teachers' perceptions and experiences about CPD is considered an important field of inquiry (Goodson, 2013, Day et al., 2000, Goodson, 2000, Elliot and Campbell, 2015, Yoon et al., 2007, Sum et al., 2018). Specifically, researchers have increasingly sought to listen and to understand teachers' perceptions on CPD policy and practice (Goodson, 2000, Day et al., 2000). This body of knowledge has shed light into what teachers find effective/ineffective and what needs to change to improve provision in various national contexts (McMillan et al., 2016). Understanding teachers' perceptions, and listening to their voices, are important as:

‘Teachers are ... not only the ones participating first-hand in these activities, but they are also those responsible for translating this knowledge into effective classroom teaching explored teacher perspectives of key components of CPD programs’ (Bayar, 2014, p. 320).

Even though teachers have a moral and political responsibility to become active in shaping their professional lives – and learning (Sachs, 2016, McMillan et al., 2016), they need to be supported in their efforts to engage in meaningful CPD. And this support needs to be based on a thorough understanding of what teachers themselves consider effective and meaningful (Sachs, 2016).

In this context, understanding Physical Education (PE) teachers’ CPD views and experiences has also been researched in various national contexts (Makopoulou and Armour, 2011b, Elliot and Campbell, 2015, Sum et al., 2018, Armour and Yelling, 2004, Yoon and Armour, 2016). The key findings of PE research are similar to the wider literature on CPD effectiveness. For example, PE teachers appear to appreciate the importance of PE-CPD but the available CPD provision lacks coherence and relevance (Armour and Yelling, 2004, Sum et al., 2018) and diversity (Souza, 2015). There is also a perceived discrepancy between what is available and what teachers’ need (Makopoulou and Armour, 2011b); a failure to take into account the context in which teachers work and learn (Yoon and Armour, 2016). PE teachers are also frustrated because of the inadequacy of the available structured support (Sum et al., 2018).

Although there is some research examining PE teachers’ CPD experiences and perceptions, this body of knowledge originates in specific national contexts (Keay et al., 2018,

Sinelnikov, 2009). In Asian countries, or Gulf countries, like Oman, there is very limited robust evidence on the nature and impact of CPD activities for teachers (Al-Lamki, 2009, AL-Balushi, 2017, Al Jabri et al., 2018). In Oman specifically, there is a very limited number of published CPD research. The available studies focus on CPD for other subjects (primarily English). These researchers conclude that there is a mismatch between the CPD programmes offered by the Ministry of Education and what teachers need (AL-Balushi, 2017). Moreover, according to MoE (2009), the impact of short courses that are provided by ministry of education is unclear. In this context, fundamental questions remain about the extent to which existing CPD provision in Oman changes teachers' practices and, similar to other contexts, research on what teachers and PE teachers think about the available support is of paramount importance (van den Bergh et al., 2015).

To make a contribution to the existing knowledge base, the overall aim of the present study was to examine teachers' experience, and perceptions regarding the nature, quality and effectiveness of the current professional programme in Oman. A semi-structured interviewing methodology was adopted with the aim to answer the following research questions:

- What are the PE teachers' understandings of the notion of CPD?
- In what forms/types of CPD do PE teachers in Oman participate, how often and why?
- What CPD do PE teachers find effective and why?
- What are the PE teachers' recommendations for future CPD programmes?

This research is timely as the Omani government shows a clear desire to improve the quality of CPD and the number of teachers involved in it (Al Jabri et al., 2018).

4.2. Literature Review

While there is a great deal of research pointing to the importance of high quality Continuing Professional Development (CPD), there are still many gaps in the literature especially in relation to robust evidence of CPD impact (Dunn et al., 2019). The concept of CPD is no longer confined to planned, formal, out-of-school, top-down and ad hoc activities. Rather, CPD encompasses the entire process of professional learning including both formal and informal ways of knowing in multiple contexts and situations (Peressini et al., 2004).

The importance of engaging in a wide range of CPD, both formal and informal, has been acknowledged in both policy documents (DFE, 2010) and a range of relevant publications (Souza, 2015, Armour et al., 2017, King, 2014, Chambers, 2014, Makopoulou, 2018, Darling-Hammond et al., 2017, Solmazand and Aydin, 2017). Learning in many different ways in various contexts is supported by contemporary theories of learning and particularly situated learning. Situated learning theorists (Peressini et al., 2004, Lave and Wenger, 1991) advocate that (professional) learning is situated in and influenced by multiple contexts. Learning is understood as “multi-dimensional: i.e. learning in one context (e.g., out-of-school workshops) influences learning in another (e.g., looking at practice with fresh eyes). When any of these types of engagement is missing, then the learning cycle is incomplete” (Armour et al., 2017).

The importance of involving teachers in CPD is widely acknowledged, as it is believed that participation in CPD can help teachers to improve or change their teaching practice (van den

Bergh et al., 2015). Therefore, it is not surprising that over the last two decades, research in seeking to find out what make some activities less or more effective has grown (Armour et al., 2017).

Despite the widespread assumption that CPD is good for teachers, looking at research from different national contexts, there seems to be a common theme: formal professional development activities have often been found to be ineffective and irrelative to teachers' needs (van den Bergh et al., 2015, Opfer and Pedder, 2011). This is also the case for PE teachers. Overall, PE teachers appear dissatisfied with the quantity and quality of *formal* CPD opportunities offered by the state (Armour et al., 2017), and there is evidence that PE teachers are frustrated because of the inadequacy of the prevailing CPD system in place and the limited structured support (Makopoulou and Armour, 2011a). There is also research from Greece and England for example that shows how PE teachers do not participate in formal CPD, such as conferences, because of the required resources (e.g., time and cost), their poor organisation, and the irrelevance of the topic to the PE profession (Souza, 2015). Furthermore, PE Teachers from three different countries (Ireland, Greece, England) reported struggling to make any progress in their professional learning (Armour et al., 2012). The researchers concluded that the PE profession simply 'does not have the capacity to support PE teachers to learn/grow/become continuously and progressively over a 40-year career' (Armour et al., 2012, p. 75).

In a qualitative investigation in Cyprus, and similar to studies conducted in Greece (Makopoulou and Armour, 2011b) and Malta (Gatt, 2016), PE teachers were concerned about the lack of meaningful action from the government, as far as CPD provision for PE

teachers was concerned. Despite the limited CPD available, both Greek and Cypriot teachers who participated in the study had overall positive views on the potential of CPD as they believed that it would benefit them to receive continuing CPD support led by CPD providers who understood teachers' needs (Makopoulou and Armour, 2011b, Hadjimatheou, 2017).

In the context of increasing recognition of the complexity embedded in and restrictions of formal CPD opportunities, policy makers (DFE, 2010) and researchers (Armour et al., 2017, Makopoulou, 2018, Darling-Hammond et al., 2017, Louws et al., 2018) acknowledge that teachers should not rely only on the provision of formal CPD, which is organised and delivered by key organizations or accredited providers (Kasprabowo et al., 2018). Rather, teachers need to understand the importance of and to engage in 'self-directed learning' (Louws et al., 2017b, p. 172). Specifically, informal learning that occurs as teachers engage in 'normal' teaching activities can trigger professional learning. Boud and Hager (2012) commented that 'nothing influences learning more powerfully and unconsciously than the everyday circumstances of work itself' (p. 24). Similarly, practice itself entails powerful professional learning (Groundwater-Smith and Dadds, 2004) as teachers make active constructions of meanings.

Grounded in situated perspectives of learning, informal learning is viewed positively in various publications. It has been argued that this kind of learning can help to sustain ongoing quality teaching (Elliot and Campbell, 2015). There are however a number of important considerations.

Informal and collaborative professional learning is difficult to monitor and accredit (Werquin, 2012), and can restrict rather than advance professional growth by reinforcing the significance of established and potentially outmoded and ineffective practices (Cordingley et al., 2015). Only a small number of large-scale studies have measured robustly the effectiveness of informal learning (Goddard et al., 2007) and existing studies yield ambivalent results (Cordingley et al., 2015). In this context, it has been argued that not all informal learning is ‘equally productive’ (Ronfeldt et al., 2015, p. 479). Whether it is effective or not depends on who is learning what and under what conditions.

To achieve high quality professional learning in the context of the workplace, according to Rosemary et al. (2007) amongst others (Darling-Hammond and Richardson (2009b), teachers need opportunities to work closely together and to ‘build relationships that will support a professional learning community’ (p.8). There is no universal definition of professional learning communities (PLCs); the literature contains various concepts and definitions. Sometimes teachers’ collaboration with colleagues is called a PLC (Rosenholtz, 1989, Dufour, 2004), or a professional community (Little, 2003), a community of practice, or a collegial inquiry community (Timperley and Alton-Lee, 2008). Researchers (e.g., Voelkel and Chrispeels (2017) and Timperley et al., (2009) explained that a PLC is a group of individuals working together to advance and improve their skills and knowledge in order to achieve shared outcomes.

The idea of developing and sustaining schools as PLCs has been incorporated into many reform efforts. Voelkel and Chrispeels (2017) reviewed 11 studies of the impact of PLC

and concluded that well-developed PLCs have a positive impact on both teaching practice and students' learning. While some believe that PLC is a systematic process in which teachers successfully work together to analyse and improve their teaching practice (Dufour, 2004), (and similar to the argument about informal learning), others argue that professional communities are difficult to implement and sustain, are not a panacea, and may not lead to improved student learning or achievement (Voelkel and Chrispeels, 2017). Given the complexity of professional learning, it is advised for researchers to both look at the contexts in which this learning takes place and to examine the opportunities offered by teachers' schools and the professional learning communities (if applicable), because the question which is still under debate is whether this kind of professional learning supports innovative teaching or not.

Leading academics in the workplace literature (Fuller and Unwin, 2010) also explain that no matter what the teachers' workplace conditions are, teachers are responsible for their own learning. Teachers, in other words, can exert their own agency over decisions to use the opportunities that the workplace offers. It has been argued that engagement in professional learning is not just affected by the school context but also by a range of individual factors (Makopoulou and Armour, 2011b). In a qualitative study conducted in Greece, for example, it was reported that teachers dealt with and engaged with the available CPD opportunities (within their specific workplace context) in different ways and as a result of a range of individual factors, such as family commitments and financial constraints (Makopoulou and Armour, 2011b).

These findings from the PE-CPD literature echo more recent findings illustrating how and why certain individuals are able to learn even though their learning environment is restrictive, while others may learn very little, despite operating in an expansive learning environment (Hoekstra and Pederson, 2018). There is therefore little doubt that teachers value formal and informal CPD. The PE-CPD knowledge base is accumulating but questions remain about PE teachers' experiences in different national contexts. In this study, it was important to ask the teachers themselves about the effectiveness of the current professional programme in Oman in order to unpack, for the first time, important questions about the nature, quality, and effectiveness of the available CPD opportunities as perceived by Physical Education (PE) teachers in Oman.

It is clearly stated in various Omani documents that any effort to reform and restructure the education system should be accompanied by appropriate CPD for teachers. CPD is presented as an avenue to improve teacher quality and, subsequently, student learning outcomes (Al Jabri et al., 2018). As a consequence, it is reported that the MOE invests heavily every year in providing CPD opportunities for educators in general and PE teachers in particular. The impact of these training is however unclear (Ministry of Education and the World Bank, 2014, AL-Balushi, 2017, Al Jabri et al., 2018) as there is no system designed to collect robust evidence about the quality of CPD implementation (Ministry of Education and the World Bank, 2014). Furthermore, the process of selecting teachers to attend formal CPD is questionable. For example, teachers are typically selected by their supervisors, and this often results in some teachers complaining that the courses they were asked to attend were irrelevant to their needs (Ministry of Education and the World Bank, 2014).

In 2009, the first descriptive study exploring teachers' perceptions about the existing CPD was administered. 150 teachers across five regions completed the survey and the overall results identified a number of problematic aspects of CPD provision. The most prevalent criticisms raised were that (1) the programmes were over-theoretical; (2) the providers lacked subject matter expertise; (3) the delivery relied on traditional 'didactic' methods without taking into consideration teachers' questions and issues ('Ministry of Education and the World Bank, 2014,'). One important concern is that the survey was distributed at the end of selected CPD programmes. This however meant that it is yet unclear whether and the extent to which CPD has an impact on teachers' practices. Therefore, it seemed useful to investigate the challenges associated with CPD for teachers in Oman by listening to PE teachers, this study will be the first that listen to teachers' perceptions and suggestion regarding the existing of PE-CPD in Oman.

4.3. Methodology

4.3.1. Research design and participants

The study was designed to examine teachers' experiences and perceptions about the nature, quality, and effectiveness of the CPD opportunities in Oman. Drawing upon a case study design, a series of individual and in depth semi-structured interviews with 11 PE teachers were conducted in order to answer the main research questions.

Based on the purpose of the study and to gain rich information about PE teachers' views and experiences, a case study was deemed the most appropriate. Case study is defined as 'an empirical inquiry that investigates a contemporary phenomenon, the 'case', within its real-

life context' (Yin, 1994, p. 13). A case study is often used by researchers who are looking to describe a case, explore a case, or compare cases (multiple cases) (Baxter and Jack, 2008a). Case studies can also be *intrinsic*, e.g., which is used by research who 'have a genuine interest' in a particular case and who use this approach 'when the intent is to better understand the case' (Stake 1995); *instrumental*, when the aim is to 'accomplish something other than understanding a particular situation. It provides insight into an issue or helps to refine a theory' (Stake 1995); or *collective*, which involves the study of multiple cases with the aim to explore the differences within the cases and between them (Yin, 2003, cited in (Baxter and Jack, 2008a, pp. 548-549). With regards to the present study, an explanatory and collective case study was selected to answer the overall research questions. This was because explanatory type can be used to describe an intervention or phenomenon and the real-life context in which it occurred (Baxter and Jack, 2008a, p. 548).

Case study, as a result design, is not without limitations. Some argue that with only a small number of cases studied, generalising the results to the wider population is impossible (Yin, 2013, Noor, 2008). Leading academics in the field, however, clarify that the purpose of case study research is not to generalise results in a traditional sense. Case study rather allows researchers to give readers access to the experiences of those researched, producing insightful and relevant knowledge about them and the contexts in which they operate (Baxter and Jack, 2008a, Noor, 2008, Thomas, 2015). This was also the primary purpose of the present study.

The ‘case’ in the context of the present study was set at the level of individual PE teachers working in post-basic education schools (PBE¹¹). Multiple, rather than a single, case studies were also selected. These teachers were purposively selected as they all worked in the same region in the capital city of Oman (Muscat). Their close proximity to the student-researcher’s institution made the study possible. So, the wider location from which the teachers were selected for both practical (e.g. ease of access) and theoretical reasons (e.g. to learn from the experiences of teachers working in an area of Oman that has access to formal CPD (Makopoulou and Armour, 2011b).

Teachers working in post-basic schools were selected for the following important reasons. Given that PE is an examination subject and the government appears to focus on improving the quality of student attainment (Al Jabri et al., 2018), it was decided that focusing on PE teachers working in these schools was important. Indeed, PB education is recognized as a very important stage in all children’s education because it is the bridge between the basic education stage and higher education or the workplace (Issan and Gomaa, 2010).

As previously noted, a total of 11 female PE teachers were study participants. The selection process of these teachers was as follows. Firstly, the student-researcher visited the Technical Office of the Omani Ministry of Education in order to obtain a permission letter to visit the schools. Once this letter was obtained, the head supervisors of the targeted area was consulted so that approximately 11 female teachers from four post-basic schools who met

¹¹ Post-basic education school includes grade 11 and 12, it replaced the general education as a result of education reform, students after they passed grad 12, they should point in different higher education institutes.

the following criteria were approached and selected to be study participants. The aim was to recruit female teachers who had varied experiences not only in relation to their university degrees (i.e. the intention was to have teachers who graduated from Omani universities but also other institutions from other countries), but also the number of years in the profession (i.e. years of experience), as well as the number of formal CPD opportunities pursued. A breakdown of the selected PE teachers who agreed to participate in the study are presented in Table 4.

Table 5: Characteristics of teachers taking part in the case studies

Teacher	Experience	Number of CPD Programmes
Novice teachers	(1-3)	
(PE1)	2	3
(PE2)	2	2
(PE3)	1	1
(PE4)	2	3
Veteran teachers	(4-9)	
(PE5)	4	2
(PE6)	7	5
(PE7)	9	7
(PE8)	6	4
Experienced	teachers (+10)	
(PE9)	30	Too many to remember
(PE10)	16	29
(PE11)	11	10

4.3.2. Main Data Collection Tool – Semi-Structured interviews

Interviewing, as a research method or tool, can be defined as a conversation between two people with the aim to obtain information, develop understandings or generate knowledge about the issue or issues under investigation (Cohen et al., 2011). Interviewing has the possibility to give the interviewer access to the ways people (i.e. the interviewee) think and feel about a specific issue (Thomas et al., 2015a); their beliefs, opinions and thinking

about all related matters to the research questions (Fontana and Frey, 2005). Although interviewing can be a time-consuming process, it was selected as the primary data collection tool in order to enable the researcher to understand and gain in-depth insights into the participants' views and experiences about the issue under investigation (Fontana and Frey, 2005). There are different types of interviewing, including structured, semi-structured and unstructured interview (Baxter et al., 2015, Freebody, 2003). Since the aim of this study was to understand the teachers' views and experiences about a topic that was largely under-explored, semi-structured interviewing was the most appropriate data collection tool. A semi-structured approach enabled the researcher to ensure that a pre-determined list of questions (the detailed interview protocol can be found in Appendix C) were asked; probing questions were posed to expand on important and relevant matter; but participants had also the freedom and the flexibility (Freebody, 2003) to talk about other related issues that were not covered in the initial set of questions. So, to summarise, semi-structured interviewing was believed to be appropriate in the context of the present study as it suited the purpose of the study, i.e. to explore in some depth teachers' experiences, views, interpretations and perceptions in the context of Oman where PE-CPD is largely an underexplored matter (Makopoulou and Armour, 2011b). The interview protocol consisted of three broad sections. The first section focused on developing an understanding of the participants' understanding of the notion of CPD and in what CPD activities they engaged. The second section was designed to collect evidence about what these teachers found to be effective CPD and what challenges and difficulties they encountered in the process of engaging in various CPD opportunities. The final part focused on the teachers' ideas or recommendations on how to improve CPD provision for maximum impact. All eleven teachers were invited to participate in an initial face-to face,

individual interview. Once the first interview with each teacher was complete, and the interactive data analysis process commenced, it became evident that these teachers should be re-approached to not only verify the researcher's interpretations (what is known as member reflections) (Makopoulou, 2018) but to also allow the researcher to collect more evidence on important matters. For example, most teachers during the first interview focused on CPD as a formal activity. It was thus important to ask more penetrating questions about other ways they believed they learn (without leading them). It was also evident that more information on the impact of different formal and informal modes of learning was required. Because of the limited available resources, the second interview was telephone interview and a teacher-specific interview protocol was developed which was specific to each case to ensure further in-depth data was collected.

Overall, the data collection process was designed to be an accessible and inclusive process, involving the selected PE teachers as active participants who engaged in a professional conversation about the issues under investigation rather than merely as objects of the research. The challenge was to provide sufficient space for their voices to be heard and structure the questions in ways that would contextualise and situated their views in the real contexts of their teaching and CPD experiences. At the same time, the project was aiming to have substantive outcomes useful to both practitioners (i.e. teachers, CPD providers) and policy makers. Full ethical approval was obtained by the ethics committee of the University of Birmingham. Furthermore, formal permission letter was obtained by technical office in the MOE; this letter was received in October 2017.

All interviews were conducted in days and times convenient to the teachers involved. Most initial interviews took place in the teachers' schools between their break times. The duration of each interview with each teacher ranged from 20 to 30 minutes and were all recorded on audio cassettes and a mobile phone. The recordings (in Arabic) were next downloaded on to a laptop and transcribed. These transcriptions were translated into English by the student researcher for the purpose of analysis. A total of 26 pages interview transcripts and a total of five to ten pages of each interview data were transcribed and analysed by the student researcher.

In order to ensure the trustworthiness of the present study, researcher used an approach called 'members reflections' (Makopoulou, 2008, Makopoulou, 2018). This involved encouraging the research participants, both during and following the end of each interview, to clarify and verify their views. Specifically, during the interviewing process, PE teachers were asked for further details and clarifications on the issues discussed or to clarify their viewpoints. This enabled the researcher to collect rich, detailed and accurate data. At the end of each interview, a review of the all key points was made by the researcher; this would help the researcher to double check with the participants if the interpretations reflected the PE teachers' perspective. This action also helped to get more in-depth information because it gave PE teachers the chance to expand their views or if they want to add any further information.

4.3.3. Data analysis

The interview data were analysed using a constructivist approach to 'grounded theory' (Charmaz, 2006). The data analysis process involved several steps. First, after each

interview, the postgraduate researcher transcribed the interview in order to be able to read through it and get a better sense of what the research participants were meaning. The second step involves translating the entire Arabic transcript into the English language to be ready to put them in Nvivo 12 software (i.e. software that the university got permission to use to analyse interviews and other data). Following data input, the third step involved a detailed coding process. This process results in the creation of 22 initial open codes (see figure 9). The aim of this process was to capture the most important details which can then contribute to answer the research questions. For example, codes (collaborative learning, workshops, discussion,) helped to understand what teachers mean by CPD programme. And this helped to answer and to get in more depth details about understanding CPD based on PE teachers' experiences and opinions.

fourth step and alongside the coding process, memo writing was carried out. This involves capturing initial thoughts about the respondents' comments in an effort to understand and unpack the meaning of their comments. This process also helped the researcher to identify what information was not clear enough which led to further data collection (i.e. second interview). The fifth step involved grouping the codes which appeared to address common issues under one category. For example, codes that mentioned earlier grouped as a meaning of CPD (formal and informal). Sixth step, categories were then grouped together to create themes. For example, category about meaning of CPD created a them (understanding what CPD involved). Four themes were created overall and these are presented in the following section.

Name	Files	References	Created On	Created By	Modified On	Modified By
Apply CPD in teaching class		2	6 4/24/2018 2:13 PM	123	4/24/2018 6:34 PM	123
collabrative cpd		3	8 4/23/2018 7:06 PM	123	4/24/2018 6:34 PM	123
cretirea of participation in CPD program		8	27 4/23/2018 4:04 PM	123	4/24/2018 6:33 PM	123
dealing with the difficulties		3	3 4/23/2018 4:01 PM	123	4/24/2018 3:40 PM	123
difficulties in teaching and to be a PE tea		14	79 4/23/2018 4:00 PM	123	4/24/2018 6:36 PM	123
example of good CPD programme		6	12 4/23/2018 4:04 PM	123	4/24/2018 6:30 PM	123
follow up		3	8 4/23/2018 6:35 PM	123	4/24/2018 6:34 PM	123
level of CPD		8	12 4/23/2018 4:02 PM	123	4/24/2018 5:52 PM	123
meaning of CPD		9	12 4/23/2018 3:59 PM	123	4/24/2018 5:37 PM	123
New Node		0	0 4/24/2018 4:52 PM	123	4/24/2018 4:52 PM	123
number of CPD programme		8	13 4/23/2018 4:02 PM	123	4/24/2018 5:57 PM	123
opinion regarding the curriculum and cy		2	3 4/23/2018 5:19 PM	123	4/24/2018 5:56 PM	123
opinion regarding workshop		12	53 4/23/2018 5:32 PM	123	4/24/2018 6:35 PM	123
overcome the difficulties		8	30 4/23/2018 5:26 PM	123	4/24/2018 6:36 PM	123
prevent from attending workshop		4	5 4/23/2018 4:09 PM	123	4/24/2018 4:52 PM	123
punishment of not attending mandatory		1	1 4/24/2018 2:16 PM	123	4/24/2018 2:16 PM	123
self improvement		1	1 4/24/2018 5:52 PM	123	4/24/2018 5:52 PM	123
selfe improvement		1	2 4/23/2018 7:00 PM	123	4/23/2018 7:05 PM	123
some suggestion to overcome some of t		1	1 4/23/2018 6:50 PM	123	4/23/2018 6:50 PM	123
teaching schedule		9	15 4/23/2018 5:07 PM	123	4/24/2018 5:37 PM	123
the benefits of CPD workshop		5	10 4/23/2018 4:03 PM	123	4/24/2018 6:29 PM	123

Figure 9: Initial coding in Nvivo 12

4.4. Results

The analysis process led to the development of four related themes structured around some of research questions and which are reported in this section. 1- The first theme examines PE teachers understanding what CPD involves. 2- The second theme presents evidence on the teachers' perceptions on the content and quality of existing CPD provision. 3- The third theme relates to the results regarding the different approaches to professional learning. 4- The fourth theme contains some recommendations for improving CPD provision. In this section, quotes from interviews are identified by means of individual numerical codes given to each teacher (e.g. PE teachers 1= PE, interview 1= In1).

4.4.1. Theme 1 - Understanding what CPD involves

One of the most important aspects of the interview was to elicit teachers' understandings of the notion of CPD. It was clearly evident that the immediate response of most teachers (n=10, In 1) on what is CPD reflected a traditional understanding of CPD as involving formal learning opportunities. Most made clear reference to a formal process, involving a CPD

programme, or ‘series of programmes’ (PE1, In1), developed ‘for teachers’ by CPD providers, such as University staff, with expertise in the specific domain of interest, and which was or were ‘normally’ delivered ‘outside the school’ environment (PE5, In1) with the aim to give teachers the knowledge to take and apply in their practices in order to improve how they teach and enhance ‘their teaching methods’ (PE1, In1). There was however some acknowledgement that CPD can also be informal. Specifically, three teachers made reference to a wide range of informal learning situations they had experienced in different contexts and for different purposes. One teacher (PE4, In2), for example, remembered an opportunity she had when she was first appointed in her school to ‘work in groups’ with other experienced teachers. This was unplanned meeting, initiated by both experienced and novice teachers and which involved a lot of ‘cooperation’ with the aim to clarify some key aspects of teaching strategies. As the teacher explained, *“I really enjoyed working in groups and we cooperated with each other”* (PE4, In2). Another teacher described how she shared resources and ideas with another teacher, who was not a PE specialist, but who had access (or had produced) a website with teaching ideas that could be applied in PE too. The PE teacher explained that she *‘took some ideas from her’* (PE7, In1) as a result of this interaction which she found valuable. Similarly, another teacher (PE11, In1) explained that because there is no much access to formal CPD programmes, teachers should also acknowledge that:

‘CPD can also be informal learning, taking place inside the school environment, with the primary aim of getting information and knowledge to understand the subject more deeply and to change the ways we teach (PE11, In1).

Whether formal or informal, there was agreement that CPD ‘has the potential’ (PE10, In1) to support teachers in their endeavours to renew their knowledge and to develop their teaching practices and skills. The need for CPD was self-evident for almost all the teachers in the context of an ever-changing education system. The need for constant updating, upskilling and access to the latest information on teaching was supported by number of teachers who argued that “no matter how experienced teachers are, they still need to refresh their information and knowledge” (PE9, In1):

“The employee should not work for 20 or 30 years having the same thoughts, processes and methodologies because this will limit her performance. Their standard performance and approach require renewal, not relying on a single programme or approach, because times are changing and nothing remains the same.” (PE8, In1)

Another teacher made reference to life as being a “field of learning”, as learning can happen quite naturally from the daily practice of observing colleagues, reading books, searching websites and holding discussions with other teachers at school, whether they are teaching the same subject or not:

“I have never relied on the [formal] professional development programmes because life is a field of learning and it helps the individual to know how to develop himself.” (PE10, In2)

Another example came from a new teacher appointed one year prior to the interview who demonstrated a broad understanding of CPD:

“Professional development happens when a teacher attends a workshop to develop his/her skills. Teachers may also seek the advice of experienced teachers and then apply in class what they have learned.” (PE4, In2)

Even though teachers were aware of the benefits of discussion with experienced teachers or colleagues at school, they still believed that they had to determine whether any ideas or new knowledge could be implemented in their own classes or not. They acknowledged that modifying the ideas obtained by other teachers was necessary to suit their lesson or their goals (2 teachers). It was thus not just a question of copying and pasting knowledge or ideas from other teachers to their own classrooms; rather, a process of modification was taking place to achieve the greatest benefit. One teacher further explained how she first had to ‘judge whether the idea suit my student level or it needs modification’ (PE4, In1).

4.4.2. Theme 2 - Perceptions on the content and quality of existing formal CPD

Despite teachers’ overall positive views on the latent potential of CPD, as reported in the first theme, it was evident that they shared some overall negative perceptions about the content and quality of *formal* and *structured* CPD opportunities available to them. Firstly, all teachers (n=11) felt that they had limited access to formal CPD opportunities. Most teachers were able to identify an average of two or three ‘workshops’¹¹ available to them on a year basis. Other teachers (n=2) however felt disadvantaged as they could not recall any workshop, they had attended over the last two years. Their argument was that nothing was advertised or was available to them in that period. Whether reporting attending formal

CPD or not, all teachers had a shared concern that they cannot access as many formal and State funded CPD as they would have liked:

‘In the last year, I have not taken any workshops except the one that was introduced in the university about teaching using technology’ (PE7, In1)

‘I do not think that I have attended any professional development programs over the last years’ (PE=10, In1)

Alongside concerns about the quantity of available CPD, teachers were also highly critical about issues around CPD quality. The matter that concerned them the most was the lack of relevance of the CPD programmes they had attended. As one teacher put it:

“Teachers need to cope with and learn about the latest developments. They do not want to be stagnant and outdated. Workshops are important for teachers’ development - they need to have access to new knowledge and ideas. But I do not feel that this is the case” (PE9, In1)

Some (n=4) argued that CPD was repetitive in nature, as most of the CPD available repeated the same content / material every year and thus failed to add anything new to their teaching practice. For example, one teacher (PE8, In1) reported attending a workshop¹² on volleyball only to be surprised as it contained the exact same content as a workshop, she pursued two years ago.

“When CPD participation added nothing new to my knowledge or teaching repertoire, it was time wasted” (PE8, In1).

¹² Workshop based on teachers’ point of view it is any formal training that is designed by the supervisors or MOE and it most of the time held for one or two days.

Another clear problem, according to some of these teachers (n=3), was the difficulty they encountered in identifying formal CPD that covered issues they needed from a teaching or pedagogical perspective. For example, many teachers explained that there are quite a few formal specialised programmes on different activities / sports, such as volleyball and basketball. However, these programmes or courses failed to support teachers develop understandings on how to ‘teach’ these activities in a school environment and in line with wider educational/curriculum goals. Their focus was rather primarily on how to coach skills and teams. They were thus potentially relevant to a different audience but were mistakenly targeting schoolteachers. Many teachers could not thus see the value in attending them:

“I think these workshops are useless as I have attended a workshop about basketball and all it covered was how to coach a basketball team” (PE8, In2).

As another teacher explained (PE7, In1), as a result, there was very little new or relevant knowledge for them and attendance had overall very limited impact on their knowledge and practice:

“I think these workshops are useless, they do not meet the needs and shortcomings of the teacher” (PE7, In1).

There was however a clear local need, according to one teacher for formal CPD to support teachers design and implement the PE curriculum:

“The only thing that we need and the directorate does not provide is the workshops that serve the curriculum of sports course” (PE8, In2).

Two teachers explicitly suggested that the quantity of formal CPD provision on offer was not the issue. What mattered was the content, relevance and the quality of these opportunities, which should - but did not always - relate to teachers' needs (PE8, In2).

"It depends to what extent the topic of the workshop is related to the teacher's field. Sometimes, one in every six workshops is useful, while the others are useless" (PE10, In1).

"The most important thing is the content of the workshop and whether I am going to benefit from it or just attend [it] because it is compulsory" (PE8, In2).

Similarly, another teacher (PE10, In1) explained that although *"it is true that we attended professional development programs [over the last two years], these did not meet my needs and did not help me address my shortcomings"*. The timing of CPD implementation was perceived as important. Some teachers explained that there was a conflict between the time of the year CPD programmes are usually taking place and the teaching undertaken at school at that time. According to this teacher, *"some workshops are taking place at the end of the semester where we have the final exams"* (PE8, In1). Some teachers (n=3) felt that some of these activity-focused CPD opportunities were implemented in the wrong side of the term:

"I attended a netball workshop in the first semester although we suppose to teach this topic in the second semester. The timing of implementation was not suitable" (PE8, In1).

Not a lot of consideration was given to the weather conditions. Some workshops held in the summer, in open courtyards or open halls, were exposing the teachers to intensely hot weather, which undermined their motivation to learn. The teachers explained that “*we are human beings; we could not endure this high temperature*” (PE9, In1); and another added that “*the shot put area, the weather, heat – these were part of the difficulties that I and the students encountered [during this CPD programme]*” (PE9, In1).

Given all these issues, it was not surprising that some teachers (n=3) felt that those with responsibilities in designing formal CPD for PE teachers seemed to ignore their preferences and suggestions. These teachers explained that they had already raised these concerns with the key CPD stakeholders but they were not listened to:

“We have already given some suggestions for many workshops at the beginning of the semester. However, they did not listen to us and they repeated the same workshops every year” (PE10, In1).

Alongside these clear limitations identified, these teachers also experienced other barriers to CPD participation. Specifically, one teacher reported her school administration preventing her from pursuing CPD. Other (PE=1, In3) also made similar claims. As a consequence, she felt that they were teaching a subject that was not valued within the school environment and not given the support they needed to develop and improve. In this context, some teachers (n=1) turned their attention to the ‘narrow-minded’ (PE9, In1) and ‘old-fashioned’ (PE9, In1) administration. Another external factor that appears to influence their motivation to learn was the lack of basic PE/sport facilities, such as courts, learning materials (books, the Internet, balls, etc.). This restrictive learning environment

put significant limitations in what these teachers could achieve in PE; i.e. a teacher believed they could hardly ‘innovate’ (PE9, In1) in their teaching:

“We face an important problem which is the lack of resources and adequate facilities which restrict [what we can do with] our teaching.... sometimes three PE teachers use the yard at the same time” (PE8, In1).

4.4.3. Theme 3 - Different ways toward of professional learning

Different teachers had different ways to deal with these reported limitations of formal CPD and they displayed a clear desire to continue to learn. Three of the teachers explained that they did not have to rely on the formal provision but rather reported learning all the time on-the-job by modifying some of the learning resources to suit the subject of PE/sport. For example, it was reported (PE7, In1) that as the years progressed and gained more experience, one teacher had more confidence in her own abilities to be creative with the available resources and to take and adapt simple ideas into PE tasks that worked well with her pupils:

“Now I am starting to put my own sports’ ideas into practice; for example, I took the crosswords game from a teachers’ website and I changed the language from English to Arabic and I use it in my class” (PE7, In1).

This teacher also showed a particular interest in the cross-curriculum potential of PE and described how she drew upon some maths games from the University’s website and changed them into games for PE which really helps to break her teaching routine:

“The website link that the professor from SQU provided us with has mathematical games that can be changed to suit PE/sport. There is also a history and geography teacher who has some different games that you can modify them through a discussion with colleagues” (PE7, In1).

For this teacher, as the above extracts illustrate, learning can be everywhere: through engagement with online material and resources within and beyond PE; through interactions with others teachers and personal study. But it was also clear that she had to do a lot of modifications to make new ideas work in her lessons.

Other teachers also reported pursuing opportunities to discuss with colleagues as they believed these discussions offered them access to new ideas. They found particularly useful when they exchanged experiences and ideas about theoretical and practical lessons; they discussed problems and sought solutions which typically revolved around student achievement and class management; and when they talked about teaching methods, which led to developing a better understanding of what these methods involved and how they could be implemented. As this teacher (PE5, In1) explained, *“working with colleagues has benefits”*:

“It has a great role to play in supporting me develop my existing knowledge, modify my ideas, improving and developing my knowledge, and to gain more experience about learners and how to deal with them effectively”.

In the case of the three novice teachers who participated in the present study, it was evident that they all had trusted, experienced teachers in their schools whom they could ask about

any professional issue. They believed that this teacher could meet all of their needs as they could ‘*ask them whatever we want*’ (PE4, In1). Some teachers (n=3) also found having pre-service teachers for their placement in their schools particularly useful. They believed that these pre-service teachers, despite being inexperienced, sometimes brought new ideas as they were still learning at University and under the guidance of professors. These teachers felt that they benefitted greatly by interactions with their pre-service teachers especially in clarifying teaching methods.

Despite overall positive views about informal learning, some of these teachers also identified some challenges encountered. Some teachers (n=3) complained that their currently workload (and overloaded timetable) restricted possibilities to learn informally and with and from other teachers, “*especially if there is no discharge from duty to participate in some learning and self-development*” (PE11, In2):

“We are having classes and sometimes if I am free my colleagues are not or vice versa”
(PE11, In2).

There was also the important issue of other teachers seeking this collegial professional learning. One teacher felt that not all teachers “are up for this kind of learning” but they rather “*prefer to work individually, separately*’ (PE11, In2). There were other restrictive factors within the school environment.

The existing lack of resources at school, as previously noted, could further affect what was possible. For example, some teachers explained that they do not have the resources (e.g.,

limited books), including access to technological advances (e.g., computer or internet access), to engage in ongoing professional learning.

“The difficulties [with informal learning] can be centred on the lack of resources available to teachers in schools.... Wi-Fi is available only in the computer room”

(PE5, In3). Some teachers also believed that the school failed to organise effective CPD to address the needs of teachers, and this was a significant limitation. But it was also acknowledged that personal factors can also prevent teachers from self-initiated, self-driven professional learning. A small number of teachers expressed a clear lack of motivation, desire and self-confidence to engage in professional (PE10, In3). Some teachers also acknowledged that because of family commitments, there was very little available time for self-initiated professional learning during their personal time:

“we have family, and I dedicate all my time...I give my full attention to them. This affects the time I have for professional self-improvement” (PE11, In3).

4.4.4. Theme 4 - Recommendations for improving CPD provision

Most teachers recommended that any CPD opportunity should relate to the content of the PE curriculum and that all teachers who teach different stages or grades should have opportunities to pursue programmes that were tailored to the age of the pupils they were teaching; rather than ‘*lumped together in one programme*’ (PE1, In1). For this teacher, this separation was important for maximum benefit. She held strong views that teachers who teach post basic classes have different needs from those who teach first cycle schools – the post basic PE is a complicated and extensive subject. Not surprisingly, teachers also recommended a review of the timing of programmes; for example, arranging workshops in

the first semester that served subjects to be taught in the following semester. Hence, they recommended that all CPD programmes should be held at the beginning of a semester for a full week so that the teachers could apply directly what they had learned.

Teachers also suggested that certain workshops, such as those on athletics, needed to be run indoors in order to avoid the hot sun. This would improve teachers' performance. Teachers did not merely recommend an indoor location for holding workshops, but also the need for an indoor setting or a closed court for their lessons in school. On this point, teachers complained that the MoE "wastes money excessively" (PE8, In2); while building courts for the schools of all the governorates. These courts are open and admit sunlight. Hence, teachers cannot use them when the weather becomes too hot. Instead, they believe that it would be better to provide a closed hall, even if it were not very big, instead of continuing to build "useless playground". At least teachers and students could feel comfortable all year round and the environment would be conducive to teaching and learning. To overcome this issue, teachers suggested that "*perhaps a private sponsor might be interested in providing some good facilities for schools*" (PE8, In2).

One teacher claimed that most of the programmes were repeated each year and never included innovative courses. Hence, it was crucial for teachers to have access to a database on CPD that would tell them who had already attended a course and who had not. Moreover, three of teachers recommended that a programme be designed hand in hand with experts in technology sectors, as they believed "*nowadays every teacher has to know how they can use technology in teaching*" (PE10, In1).

4.5. Discussion

The results of this study provided evidence that most of the teachers strongly believed that engagement in CPD programmes, whether formal or informal, has the potential to improve their teaching practice. Overall, these PE teachers were positive about the potential of formal CPD. Like teachers in other countries, they appeared to wish to pursue formal CPD more frequently (Armour and Makopoulou, 2012, Bayar, 2014, Makopoulou and Armour, 2011b, Makopoulou and Armour, 2014, Gore et al., 2017) but they were also clear that more of the some CPD would not be sufficient. Indeed, most of these teachers criticised the available structured / formal CPD opportunities they had experienced for failing to meet their needs.

This issue was not different from other contexts such as the US, UK and Australia, where researchers also concluded that traditional forms of CPD are unlikely to be effective in supporting professional (Makopoulou and Armour, 2011b, Armour et al., 2017, Armour and Yelling, 2007). For decades, researchers claim that formal CPD programmes, of short duration, cannot lead to meaningful change at the level of educational practice (Friedman and Phillips, 2004, Armour and Makopoulou, 2012). It is therefore difficult or almost impossible to see improvements in the learning opportunities for young people (Armour, 2015, Armour and Chambers, 2014). The points these PE teachers raise regarding some of the problems and challenges evident in formal CPD structures and opportunities in Oman are not a new finding. In 2009, a survey seeking to examine teachers' perceptions and experiences about CPD (sample size 150) reported similar findings, especially in relation to the concerns about the repetitive and irrelevant nature of provision ('Ministry of Education and the World Bank, 2014,').

In relation to CPD repetition, teachers who participated in the present study questioned how relevant and useful CPD was: they explained that workshops had repetitive content. Some teachers claimed that they had raised this matter with the CPD organisers, but that their voice and concerns were ‘ignored’. Providers rather carried on delivering the course as per their predetermined plan. Researchers have also claimed that failing to involve teachers in choosing the content of the programme, and not taking the necessary steps to address teachers’ needs is highly problematic (Patton et al., 2012). This appeared to be the case according to the teachers in the present study. Crucially, they argued that the repetitive and irrelevant CPD content was largely due to the inability of CPD stakeholders to listen to what teachers wanted/needed.

It could be argued that this is not a surprising finding; and it is not an issue confined to the specific context this study was conducted. Numerous researchers have raised this as a highly problematic and reoccurring issue in a range of contexts (AL-Balushi, 2017, Bangs and Frost, 2012). Makopoulou and Armour (2011) argued that ‘offering teachers a “voice” and listening carefully to what they had to say could offer useful insights into teacher learning and the design and structure of future PE-CPD provision’ (p.587). These two important matters, ignoring teachers’ voice and organising CPD that is repetitive in nature, are issues that have been raised by other teachers in other countries (Bayar, 2014, Armour et al., 2012, Hadjimatheou, 2017). To address these issues, many of these teachers recommended that all the directorates should pay attention to teachers’ opinions, as teachers are the ones who are supposed to make the changes in the workplace. Evidence also suggested that because of the rapid educational and societal changes, and because of the issues surrounding formal CPD, many of these teachers did not rely on formal CPD

programme. They did not believe that such programmes are sufficient in improving (Swennen et al., 2015). Researchers in various contexts have found that informal learning is a good alternative to the traditional CPD form (Hadar and Brody, 2013, Armour and Yelling, 2007, Kyndt et al., 2016). Similarly, in the context of this study, it was evident that informal learning was a valuable tool for other teachers across the career span (Armour et al., 2017).

Internationally, researchers have explored teachers and PE teachers' informal learning patterns and impact (Gatt, 2016, Bayar, 2014, Makopoulou, 2008, Hadjimatheou, 2017). In the US context for example, by working with others in a learning community, PE teachers reported being able to change their beliefs about teaching and their practice as well (Deglau and O'Sullivan, 2006). In a different research project in Korea, novice teachers adopted and implemented successfully a new teaching approach as a result of meaningful interactions and adequate support from experienced teachers in their schools (Yoon, 2017). Some teachers in the present study also believed that improved knowledge and practice came naturally from the daily experience of teaching and by learning from experienced teachers in their school. They were able to identify that learning occurred as they tried to solve problems, answer each other's' questions, exchanges ideas or experiences.

Over the past two decades the interest in workplace learning has intensified (Ellström, 2001). Learning at work is recognized as an important aspect of teachers' work (Kooy, 2012). Teacher's workplace is important because it can help teachers to implement new ideas developed in various contexts, including outside the school context, in their own practice (Armour and Yelling, 2007, Kooy, 2012). When the workplace is successfully

transformed into a learning community, there are great possibilities for change and innovation (Armour et al., 2008) but this is not always the case (Armour, 2010, Hodgkinson et al., 2007). Informal learning, in other words, also has some difficulties which might affect its quality and effectiveness (Gatt, 2016). For example, the 'learning' that happens might be based on unreliable sources or incorrect information (Gatt, 2016). In the study, despite being overall positive in term the quality of CPD, teachers faced some challenges in informal learning; such as lack of motivation on behalf of other teachers who appeared to prefer more individualised forms of learning and difficulty in coordinating their free time. Result from a small-scale research in Oman suggest that teachers faced many obstacles when trying to work together and to make use of what they have learned from CPD programme in their school (Al Jabri et al., 2018). Teachers identified a clear lack of support from their principles, supervisors and even colleagues sometimes. An experienced teacher in the present study described her school as a restrictive school and felt that teachers in her school were lagging behind others whose knowledge was updated because of a most supportive school administration.

Therefore, results from the present study also identify some challenges in informal and collaborative learning but also suggests that despite the lack of facilitating structures for informal learning, some of these teachers sought to learn with and from each other; and they had taken the initiative to do so. Researchers have reiterated that questions remain about how teachers work and learn effectively together; how informal and collaborative learning lead to enhance student learning (Darling-Hammond & Richardson, 2009; Makopoulou & Armour, 2014), and how this type of learning can be supported, encouraged, and developed effectively (Swennen et al., 2015). Results from this study

suggest that there was a clear appetite (and acknowledgement of the importance of this type of learning). Policy makers, school leaders and teachers must however be educated on how to engage in that process effectively to maximise impact. It is important to underline that Omani schools are officially responsible for offering professional learning, but there is little evidence that this policy aspiration has been put in practice effectively and consistently, and for all teachers in schools. This is possibly because, and paraphrasing Lortie's work (2002), schools in Oman are 'traditionally organized around teachers' separation rather than their interdependence', and most teachers work alone with their students. The teachers in the present study also reported suffering from poor facilities at school; they claimed that the open playground resisted any desire to provide innovative ideas or changes of any kind. This finding makes it crucial for the government to pay serious attention to this issue; if it is trying to improve teaching quality and enhance student learning, it should in the first place provide adequate infrastructure for its teachers to improve their practice. This issue has already been discussed by researchers from several countries. According to Darling-Hammond (2006) all citizens and professionals have a right to learn; hence, governments must invest in creating the required infrastructure for the provision of intensive and continued professional development. In Peru, for example, the government recognises the need for high quality education, hence, it has spent millions in different projects across the country, many concerned with constructing and renovating school facilities (sports facilities and textbooks and other educational materials for students). This investment in school infrastructure has had a positive effect on the school attendance rate among young children. The conclusion is that there seems to be a close relationship between spending on school facilities and improved teaching practice and students' learning (Paxson and Schady, 2002). Greece also has

announced policies reflecting the importance of infrastructure in schools, according to (Makopoulou and Armour, 2011b) investment in CPD in Greece would be timely because, as (Billett and Pavlova, 2005) stressed in a different context, ‘maintaining and improving the capacity to be effective in work is now held as an important social goal in maintaining individual, local and national wellbeing, including the standard of life and social provision (e.g. Education)’ (Makopoulou and Armour, 2011b, p. 587). The importance of improving school quality has also been recognized in Nicaragua for some time now (Pradhan and Rawlings, 2002); its education investment has had a positive, significant impact on school outcomes. Compared with all these research findings on the importance of improving school facilities, Oman’s investment in re-planning schools seems, if anything, overdue. In an improved context, as previously noted, there is also a need to further support teachers in their endeavours in order to maximise the possibility of professional learning in situ and there is a still work in progress to emphasise the need of support from schools and government.

4.6. Conclusion

The study was designed to explore the opinion of a small group of PE teachers regarding the existing CPD in Oman. It was set out to collect and provide qualitative evidence on teachers’ experiences in order to inform CPD policy and practice. Evidence suggests that the current formal, state-funded CPD programmes for PE teachers are not designed in a way to challenge and to support them progress in their learning. All teachers were in agreement that, with minor exceptions, the vast majority of CPD has failed to address their pressing questions and needs. Some teachers, in this context, talked about the potential of informal learning. There were examples of teachers identifying some impact such as sharing idea, clarification of

some teaching issues, improving knowledge and practice. However, these teachers also acknowledged some challenges in the process.

Despite being the first of its kind in the context of Oman, this was a small-scale study. More empirical research is needed to figure out what benefits teachers derive from CPD and why most of the CPD programmes so far have failed to satisfy them. It would also be helpful to discover what motivates teachers to engage in CPD and how effective CPD programmes can be in meeting their needs. Even though the results of this qualitative study cannot be generalised, it contains important messages for CPD policy in Oman. The first clear message is that, in designing CPD programmes, it is paramount that key CPD stakeholders listen to teachers' voices about the content of the experiences, so they are challenged to progress in their learning.

CHAPTER: FIVE

STUDY THREE: A CASE STUDY IN UNDERSTANDING CPD PROVIDERS' BELIEFS AND PRACTICES IN THE PE-CPD PROGRAMME IN OMAN

5.1. Introduction

It has been widely recognized that teachers can play a key role in improving wider educational goals, including improving the quality of teaching and learning and raising academic achievement (Atencio et al., 2012, Barrera-Pedemonte, 2016, OECD, 2009, Makopoulou and Armour, 2011b, Louws et al., 2017c, Main and Pendergast, 2015, Armour et al., 2017, Zhang and Wong, 2018). These important goals or outcomes, although prominent in many educational initiatives around the world, ultimately rely on teachers changing and improving how they teach, if their current practices do not work. Sometimes, to achieve the desired positive outcomes, this process necessitates deep as opposed to surface change (Coburn, 2003). It could be argued that any kind of change requires a great deal of learning and improvement on the part of the teachers. Hence, teachers need access to high quality continuing professional development (CPD) throughout their careers (Makopoulou, 2018) as it is considered a tool to support professional learning.

There is ongoing debate about the true value of CPD. At the beginning of the century, the positive relationship between CPD participation and improvement in students' achievement levels was emphasized (Villegas-Reimers, 2003, Powell and Bodur, 2019).

Most of the publications at the time were however based on rhetoric rather than scientific evidence. More recent publications report mixed results, with some large scale, university led and evidence-based CPD programmes finding no significant CPD impact on student achievement (Hill et al., 2013). This body of work, and the mixed results reported across different studies, reveals some of the challenges CPD researchers encounter in their endeavours to measure CPD impact on students. Despite the fact that these results have led some leading researchers to question the validity of the existing consensus about the features that make CPD effective (Hill et al., 2013), the importance and value of CPD participation is still acknowledged. Researchers argue that CPD must be an integral part of teachers' careers (Patton and Parker, 2014) but they highlight that the quality of CPD itself is a very important factor (Powell and Bodur, 2019).

CPD it is ongoing process which can range from formal (seminars, conferences, courses) to informal (collegial conversations, problem solving, reflection) (Armour et al., 2017) learning experience. Engagement in formal or informal CPD typically involves staff in schools, individually or collectively / collaboratively, to think about what they should do to enhance their knowledge and skills with an emphasis on improving the ways they teach so that student learning is enhanced (Stoll et al., 2012). It has been argued that CPD that is adopting a 'traditional' format - i.e. when it takes place out of school, it is of short duration and seeks to update or enhance teacher knowledge, without taking into account teachers' starting points and professional learning needs - is inadequate and fails to support deep-level change and to have a lasting impact on teachers and students (Makopoulou, 2018, Patton et al., 2012). This is particularly the case when CPD provision is fragmented and not grounded in the way teachers learn (Makopoulou, 2018).

Despite these concerns regarding traditional CPD programmes, recently, some studies have argued that CPD of even short-duration can have a positive impact on participants and can have a lasting impact on teaching and learning (Cordingley et al., 2015). This is particularly the case when such programmes are grounded in a thorough understanding of how teachers learn (Armour & Makopoulou, 2012). This involves enabling teachers to work collaboratively, reflecting on their teaching and supporting teachers to share their knowledge with each other (Hunuk, 2017). These programmes help teachers to learn how to improve their teaching especially when opportunities to connect learning that is taking place in the CPD with their own teaching are offered (Patton and Parker, 2014). But researchers also acknowledge that creating a successful, meaningful and relevant professional learning experience is a complicated process because there are many factors that influence teachers' development (Makopoulou and Armour, 2011b, Cordingley et al., 2015).

Despite these challenges, both policy makers (DoE, 2010) and leading academics in the fields of professional, workplace learning (Fuller and Unwin, 2010, Hoekstra and Pederson, 2018, Viskovic, 2005) highlight the importance of regular access to external expertise in various contexts (Makopoulou, 2018). Whether teachers participate in high quality formal and out-of-school CPD or have experts invited in their schools, it has been argued that external partners can stimulate new thinking and offer challenge and support to practitioners to improve their practices (Eraut 2010; Stoll 2012). It is therefore important to examine and understand the perceptions and practices of those responsible for the professional development of teachers, as they appear to play an important role in the process (Patton et al., 2012b). Yet, although research on this important field of inquiry is accumulating

(Makopoulou, 2018, Goodson, 2013, Day et al., 2000, Elliot and Campbell, 2015, Yoon et al., 2007, Sum et al., 2018, Makopoulou and Armour, 2011b), most studies are carried out in specific national contexts (mainly the US and the UK). It is thus important research to begin to unpack their perceptions and practices of professional developers in various national contexts in order to develop an international knowledge base upon which CPD programmes and initiatives can be informed.

5.2. Study purpose

The overall aim of the study was to examine the key aspects of the existing government-funded CPD system in Oman from the perspective of CPD providers. These CPD providers are based in higher education institutions, local directorates, and the Ministry of Education (MoE). As argued in this paper, CPD providers can play a central role in supporting teachers to learn (Makopoulou, 2018; Patton et al., 2012b). Collecting evidence on these CPD providers' perceptions is therefore vital in order to develop a holistic understanding of the CPD process in a given national context.

In this context, the study sought to answer the following research questions:

1. What are the CPD providers' perceptions about the meaning and importance of professional developments for teachers?
2. What CPD opportunities do these providers report delivering to teachers and why?
3. What opportunities and barriers do CPD providers identify in their endeavours to support teachers to learn?
4. How do PE teachers learn in effective ways according to the CPD providers and why?

5. In what ways should future CPD provision be improved according to these CPD providers?

A case study design was adopted to address these questions, and evidence was collected via semi-structured interviews with 10 CPD providers from different organizations. Though conducted in a specific national context, the study was grounded in and informed by the international literature on effective CPD. Results can thus make a contribution to the development of the knowledge base on the ways CPD providers conceptualise and practice CPD in various national contexts. Evidence can also offer insights on the applicability, relevance and perceived effectiveness of the specific CPD approaches adopted in Oman, with the potential to inform CPD policy and practice in this country.

5.3. The features of effective CPD and the role of the providers

There is little doubt that CPD is the key mechanism for teachers to learn and develop themselves in order to meet the complex needs of their students (Goodyear, 2017). Over the last few decades, researchers are seeking to identify what makes CPD effective (Ingvarson et al., 2005) and what impact CPD has on teaching practice (Dunn et al., 2019). Even though, there is no one specific approach or form that has been shown to be better than other (Hunuk, 2017, Powell and Bodur, 2019), most publications to date (Desimone, 2009, Main and Pendergast, 2015, Hunuk, 2017, Day, 2015, Cordingley et al., 2015, Timperley et al., 2007, Ingvarson et al., 2005) often provide a list of key, ‘effective’ features that can maximise the possibility of CPD impact. In summary, it has been argued that CPD needs to: (i) allow teachers to collaborate; (ii) be sustained over time; (iii) foster teachers to be active professional learners (rather than passive recipients of knowledge generated elsewhere); (iv)

support teachers develop their subject knowledge (and how students learn this content); (v) be coherent (in other words, have a sense of continuing and be in line with the teachers and schools' priorities or goals for improvement); (vi) allow collective participation; and (vii) be led by professional developers who display in-depth knowledge and understandings (they are in other words experts in the field).

There are also publications that acknowledge that the effectiveness of CPD provision is context bound (Makopoulou and Armour, 2011b). This means that what works in one context might not work in another. Creating a successful, meaningful and relevant professional learning experience is a complicated process because there are many factors that influence teachers' development (Cordingley et al., 2015). In other words, the effectiveness of CPD provision depends on a combination of factors, including not only participants' motivation (and other personal factors, such as personal teaching philosophy, teachers' commitment in teaching PE, family commitments, level of experience; but also the school culture in which they work (and how much their schools facilitates or hinders their learning), as well as the nature and quality of the CPD programme itself. In relation to the school culture, despite the recent calls internationally to transfer school into learning organizations (Fuller and Unwin, 2010), there is evidence to suggest that teachers in some national contexts are still working in isolation with limited structured opportunities to facilitate workplace learning (Makopoulou and Armour, 2011b).

One of those complex factors that can contribute to the effectiveness of CPD provision and can shape its quality and impact is the professional developers themselves (Le Fevre and Richardson, 2002). It is expected that CPD providers, whether school staff with CPD

responsibilities or external experts, play a central role in supporting teacher learning (Makopoulou, 2018; Patton et al., 2012b). Typically, CPD providers are responsible for working with a group of teachers in order to help them change and improve their teaching practice (Makopoulou, 2018). Frequently, this interaction and collaboration takes place over time in the context of sustained CPD programmes. Other times, this interaction is only short term and one-off. In any case, being an effective professional developer (Poekert, 2011), is not an easy task. Research suggests that CPD providers face a host of challenges in their efforts to support professional learning (Poekert, 2011). These include practical issues (e.g., limited time and resources), which is then linked to the challenge of building trust with the teachers to maximise their participation and learning.

It is also the case that, teachers as learners are diverse. They have different starting points, different questions and needs and the role of the facilitator is to support all of them to engage in a process of professional growth. Meeting teachers' diverse learning needs, research shows, is probably one of the most challenging aspects for CPD providers (Patton and Parker, 2014, Le Fevre and Richardson, 2002, Makopoulou and Armour, 2011b). Moreover, CPD providers should not just focus on 'transmitting' knowledge and skills to teachers. Rather, they should develop their ability to encourage teachers to be active seekers of knowledge and to help them becoming independent learners (Patton et al., 2012). It is being suggested that asking the right questions to make teachers think reflectively about their existing practice is one aspect of an effective CPD provider (Hunuk, 2017).

In the context of PE-CPD research, academics have attempted to group these different aspects of what professional developers are expected to do into three broad categories (Hunuk, 2017). Providers, it has been argued, should encourage teachers to learn by providing structure without dictating ('learning as doing'), providing opportunities for teachers to develop and test new ideas ('learning as trying') and by encouraging teachers to publicly share their work ('learning as sharing') (Patton et al., 2012b).

There is now a significant body of research that seeks to explore CPD providers' perceptions about effective CPD. Overall, there seems to be consensus amongst CPD providers or facilitators engaged in research, that for a CPD to be effective, they need to encourage teachers to view themselves as learners (Hunuk, 2017). It is important, research suggests, to avoid transmitting teachers with knowledge and skills but to rather engage teachers in actively constructing new knowledge and understandings (Patton and Parker, 2014, p. 67). CPD providers also suggest that it is important to involve teachers in the design of the CPD experience, whenever possible, as this can motivate teachers to learn and increase their confidence (Patton and Parker, 2014). PE-CPD providers have also argued that real change does not happen overnight; it rather requires time, opportunity and ongoing support (Patton and Parker, 2014).

With regard to experienced PE-CPD providers, they argued that creating a safe environment in which teachers can express themselves and feel valued and confident to engage and try something new was paramount to successful CPD (Makopoulou, 2018). Also, they argued that understanding different teachers' learning needs, understanding their context and making the content relevant to them were very important for a successful CPD experience.

(Makopoulou, 2018). There is also consensus that CPD providers need to take greater responsibility for the outcomes of their efforts (Patton and Parker, 2014). In this line of thought, it is apparent that just as teachers need to relearn their teaching practice, CPD providers also need to relearn, review and change/improve their provision (Patton and Parker, 2014). Although much has been written about the magnitude of the shift required for teachers when embarking on the change process, little is known about the changes required for CPD providers as they make their practice more responsive to teachers' diverse needs and the demands of the current reform era (Stein, Smith, and Silver 1999; Wilson and Ball 1996).

Overall, although research into the CPD providers is accumulating, fundamental questions remain about the elements of their 'pedagogies', or the 'pedagogy of facilitation' (Poekert, 2011) and how CPD providers can facilitate effective professional learning. Furthermore, little is known about how CPD providers are selected / recruited and prepared to undertake this challenging role, what kind of support they get and how their work is evaluated (Kennedy, 2016). Finally, most of the available publications focus on CPD providers' perceptions on what is effective CPD and little is known about their actual practices.

To address this gap, in a recent study conducted in the context of a national CPD programme on inclusion (Makopoulou, 2018), researchers sought to put CPD providers' or tutors' practices 'under the microscope with the aim to 'examine CPD tutors' perceptions and practices in the context of a 'traditional 'day-long course' (Makopoulou, 2018, p. 262). The key findings of this study were that all CPD providers believed that offering cognitively active and practical experiences was one of the most important

components of effective delivery. However, significant variation in the way tutors facilitated professional learning was identified. Despite their beliefs about the importance of giving teachers the opportunity to actively construct knowledge, most tutors dominated provision. When teachers had opportunities to work together to construct inclusive pedagogies, most tutors showed little understanding of how to support / facilitate their learning in meaningful ways.

In the context of very limited knowledge about a number of issues related to CPD providers, it was appropriate to seek their perceptions about CPD provision in Oman too. This examination was critical because their perceptions and intentions influence the CPD experience and the opportunities available to teachers (Patton and Parker, 2014).

5.4. Methods

Full ethical approval was obtained by the University of Birmingham's ethics committee. A formal permission letter was also obtained from the Technical Office in the Ministry of Education in Oman. All the participants in this study were informed about the purpose of the study and were given the right to withdraw from the study at any stage. There was also reassurance, and all appropriate steps were undertaken, to ensure that all data obtained would be treated confidentially and would be used just for the purpose of the study. Written assurance was given to them regarding the anonymity and confidentiality of the research data (Pwoell et al., 2003).

5.4.1. Research design and participants

This study was designed to examine CPD providers' perceptions about the meaning, purpose, application and impact of the existing government-funded CPD provision for PE teachers in Oman. In a case study format, a series of individual and in-depth semi-structured interviews with CPD providers were conducted in order to examine their opinions regarding the existing CPD in Oman. According to Gerring (2004), case study is 'as an intensive study of a single unit for the purpose of understanding a large class of similar units' (p.342).

It is widely accepted that case study is the most appropriate study design for researchers seeking to gain deep insight into specific issues and to answer fundamental questions about social practices (how) and, their rationale/justification (why) (Noor, 2008, Thomas et al., 2015b). If conducted well, case studies can yield rich information, but it is important that the evidence collected reflects to some extent the diversity of the target population. Case study is used also to investigate actions, and attitudes (whether of individuals, groups or organizations) by applying one or multi methods such as observations, interviews, or by analysing different relative documents (Meyer, 2015). In the context of the present study, only one data collection method was employed – i.e. semi-structured interviewing - largely because of lack of resources (e.g., time and funding to travel to Oman on multiple occasions) and a lack of any CPD programmes being implemented at the time the data collection took place.

There are different types of case study and the selection of a specific type is important and should be based on the overall purpose of any given study (Gerring, 2004) Specifically, a case study design can be employed by researcher who are seeking to describe a

phenomenon using one or more cases ('descriptive' case study, using Yin's 2013 terminology), or to explore an issue ('explanatory' case study), or to compare a phenomenon as evident in different cases (Baxter and Jack, 2008b). According to Yin (2013), case studies can also be intrinsic, instrumental, and collective. Intrinsic case study is used by researchers who 'have a genuine interest in the case should use this approach when the intent is to better understand the case' (Stake 1995). Instrumental case study 'accomplishes something other than understanding a particular situation. It provides insight into an issue or helps to refine a theory' (Stake 1995). Finally, collective case study is similar to Yin's (2003) notion of multiple cases and is used in order to explore the differences within and between the selected cases (Baxter and Jack, 2008a, pp. 548-549). With regards to the present study, explanatory and collective case studies were conducted to answer the research questions (Baxter and Jack, 2008a, p. 548).

To select the case studies, and because of the researcher's prior knowledge of the key CPD organizations with responsibility in designing and implementing CPD for PE teachers in Oman, it was decided that CPD providers working in four different organisations should be recruited. This would enable to collect evidence of CPD providers' perceptions that reflect the potential diversity of perceptions of those providers working these different organisations. Specifically, a total of ten CPD providers were invited to participate in the study. The number of CPD providers' participation was both practical in terms of time of the study and sources available-and defensible in terms of the different CPD providers experienced covered. The present study was not set out to achieve a 'representative' sample, as traditionally understood; but rather focused on getting in-depth understandings from providers working in different PE-CPD contexts in Oman.

To select these providers and to make sure that providers with a diverse range of experiences were included in the sample, a combination of convenience and snowballing sampling was employed. The providers recruited included five academic members of staff (three males and two females), with experience ranging from 18-30 years, and who worked in the main university. These were previously known to the researcher and had a significant track record of involvement in CPD for PE teachers. The reason that half of sample were coming from the Sultan Qaboos University (SQU) is because these institutions offer a range of CPD courses, both practical and theoretical, each year.

The other CPD providers were recommended to the researchers by the university staff members (snowballing sampling) and were based in the local directorate (n=2, 16 and 23 years of experience), the Ministry of Education (n=2, 27 and 23 years of experience), the Specialised Centre for the Professional Training of Teachers¹² (n=1, 18 years of experience) (see table: 6). The recruitment process involved personal contact via phone, when the purpose and importance of the study was explained. Once agreement was given, the data collection took place at a time and location convenient to the participants.

CPD Providers organizations	CPD providers	Year of experiences	Number of Programme
Muscat Directorate	P (1)	23	More than 100
Sultan Qaboos University (SQU)	P (2)	18	12-15
Muscat Directorate	P (3)	16	15
Special Centre for the Professional Training of Teachers (SCPTT)	P (4)	18	35
Sultan Qaboos University (SQU)	P (5)	15	35

Ministry of Education	P (6)	23	Do not remember
Ministry of Education	P (7)	9	Do not remember
Sultan Qaboos University (SQU)	P (8)	More than 15	10-15
Sultan Qaboos University (SQU)	P (9)	15	7
Sultan Qaboos University (SQU)	P (10)	30	20

Table 6: Characteristics of CPD providers taking part in the case studies

A case study design, although adopted, is not without its limitations. For example, results from case studies – unless conducted in the context of funded, large scale projects, typically cannot be generalized in the traditional sense (Stake, 1995, Noor, 2008, Yin, 2013). Thomas (2015) has recently explained that generalization is not always a priority in some types or forms of research. Even when small scale, as is the case in the present study, case study research can still offer rich detailed information about the phenomenon studied. Since the aim of the present study was to develop insights into CPD providers’ perceptions, a largely underexplored field of inquiry in Oman, the selected design and methods was appropriate.¹³

5.4.2. Main data collection tool: semi-structured interviewing

To gather in-depth, detailed data to answer the main research questions of this study, interviewing was the main data collection tool employed. Interviewing is an established method in educational research (Powney and Watts, 2018). It typically involves a guided conversation between the researcher who seeks information on perceptions, experiences,

¹³ (SCPTT) is a state-funded CPD organisation which specialises in trainee teachers, school administrators and local supervisors or CPD providers

attitudes, feelings or viewpoints from those being interviewed, the research participants (Baxter et al., 2015). Unlike every day, informal and unintentional conversations (Brinkmann, 2014), the purpose of interviewing is to obtain detailed, in-depth information about the issues under investigation.

There are many different types of interviews, including structured interview, semi-structured interview and unstructured interview (Freebody, 2003, Baxter et al., 2015). It has been argued that researchers need to select the type of interview that fits the purpose of the study and the targeted group (Armour and MacDonald, 2012). In the context of the present study, a semi-structured approach was adopted. Even though, a semi-structured approach cannot guarantee consistency in the content / evidence collected (Baxter et al., 2015), is the most common type of interview used by researchers (Freebody, 2003, Brinkmann, 2014). This is probably the case because it allows the interviewer to gather data about the range of issues under investigation whilst giving participants a degree of flexibility to broadly express their opinions about the issues (Freebody, 2003). It also provides an opportunity for follow up (Baxter et al., 2015). For those reasons, this type of interview fit the aim of the present study.

With a semi-structured approach to interviewing employed in the present study, it was important to develop a detailed interview protocol. The intention was to include a series of topics and questions to be covered, as well as probes in order to gain access to participants' perceptions. Furthermore, it was important to acknowledge that while researchers would outline the main topics that needed to be covered in this interview protocol, at same time, some degree of flexibility regarding the phrasing and the order of

the questions was needed (King et al., 2018). It was also acknowledged that during the interview process, it would be important to allow research participants to talk about issues that were important to them, even if these were not included in the pre-planning phase, as long as they were related to the topic under investigation. Finally, it was also important for the interviewer to exert some form of control to the interview process (by ensuring that the conversations do not stir to unrelated matters and there is no time left to cover what was planned for) and to guide the interviewee to clarify any answers that required further clarity (Flower, 2001). The student-researcher carried out some pilot interviews with colleagues to ensure that questions posed were clear and relevant; and to practice adhering to the issues outlined in this paragraph.

The interview protocol consisted of four parts (see Appendix B). In the first part, the aim was to obtain evidence on the CPD providers' perceptions of the meaning, purpose and importance of CPD, as they understood this at the time of the research. Example questions included:

- Can you please tell me what is your understanding of the concept of continuing professional development?
- Is CPD important for PE teachers or not and why?
- What are the broad aims of CPD in this country?
- Can you identify and explain the aims of this CPD initiative (when they referred to a specific initiative)?
- Who is responsible for PE teachers' CPD?

Seven questions were asked in this part to obtain in depth information.

In the second part, the focus of the questions turned to the specific roles these CPD held. This was important in order to understand in what PE-CPD opportunities were these providers involved, what these opportunities looked like and why. 13 questions were included, such as:

- What is your main role as a CPD provider?
- How many CPD programmes do you run per year? Why do you run these many?
- Are you the only one responsible for CPD in this area or not?

Could you please give an example of the content of the programmes you provided last year? The third part covered issues relating to CPD nature and impact and included gathering evidence on the CPD providers' perceptions on the impact and effectiveness of the existing CPD opportunities to PE teachers. The questions targeted CPD opportunities they run but also sought to understand their views on the broader PE-CPD opportunities on offer. The final part was about CPD providers' opinions about what needs to happen to improve the existing provision (e.g., In your opinion, what needs to be done to improve the quality and the process of CPD activities?').

All the participants of this study were invited individually for a face-to-face interview in a place and at a time that was convenient for them. The duration of the interview with each CPD provider ranged from 40 to 50 minutes and was recorded on audio cassettes. All the interviews were in Arabic, and then the transcriptions were translated into English for analysis purposes. A total of approximately 400 pages of transcribed interviews in English

were analysed. In order to ensure the trustworthiness of the present study, the researcher used an approach called ‘members reflections’ (Makopoulou, 2018) This involved encouraging the research participants, both during and following the end of each interview, to clarify and verify their views. Specifically, during the interviewing process, the CPD providers were asked for further details and clarifications on the issues discussed or to clarify their viewpoints when and if ambiguous. This enabled the researcher to collect rich, detailed and accurate data. Furthermore, at the end of each interview, a summary containing key points from the interview was created by the researcher and discussed in length with the CPD providers in order to ensure that the researcher’s interpretations of what the CPD providers were communicating reflected their perspective in an accurate way. This also provided further opportunities for data collection when CPD providers were willing to expand on the summary. Finally, and to increase the trustworthiness of the present study, researcher did a follow up to some of CPD providers via telephone in order to clarify some points such as what was the reason behind such activities (model lesson, exchanging visit, peer visit) and who was the responsible to deliver these activities. This step helped the researcher to engage in member reflection and to collect further data (Makopoulou, 2018).

5.4.3. Data analysis

A version of constructivist approach to grounded theory was used to analyse the data from the interviews (Charmaz, 2006). Grounded theory (GT) is define as an approach to data analysis that ‘consists of systematic, yet flexible guidelines for collecting and analysing qualitative data to construct theories from the data themselves’ (Charmaz, 2014, p. 1). By using Grounded theory (GT) approach, researcher can do coding, comparing the data and

grouping the codes in a category in order to develop a theory (Charmaz and Belgrave, 2007). Moreover, (GT) is used by research who aims to ‘investigate individual and collective actions and social and social psychological process such as everyday life in a particular social setting or organization changes’ (Thornberg and Charmaz, 2014, p. 154). Since the researcher of the present study sought to investigate CPD providers’ perceptions about CPD, GT was a useful method to be used for analysing the data.

The data analysis process involved several steps.

- The first step involved the postgraduate researcher reading each Arabic transcript with the aim to get a better sense of what the research participants were saying and meaning.
- The second step was to translate all the relevant parts of the interview transcripts to English for further, more elaborate analysis.
- The Third step, once all interviews were translated, all the transcripts were input into NVivo 12 (i.e. a software that the university got permission to use to analyse interviews and other data).
- The fourth step, once all data were inputted into the software, a detailed coding process started. According to Corbin and Strauss (2008) coding is recognised as the core concept in analysing data in grounded theory. This involved open or initial coding (138 codes, see figure 10) which helped to capture the important information that contributed to answer the research questions. The coding process also helped the researcher to compare the different codes and to identify similar information or points of disagreement (Cohen et al., 2011). So, the coding process was a significant one in order to begin making sense of the key issues identified by the research participants. Some example of initial coding was

structured programme, courses, practical, theoretical, process of learning, programme to improve teachers' performance.

- The fifth step, to enable the start of the analytical and interpretation stage, while coding, the researcher also engaged in what is known as memo writing (Hadjimatheou, 2017) (see figure 11).

This process was important because it enabled the researcher to identify what information was clear, coherent and rich and what further data should be collected in order to clarify points to gain more in-depth understandings. So, in other words, this memo writing process served the important purpose of connecting the available data and further collection of data. For example, I realized that I have not asked CPD providers about some of nonformal CPD programme at school, then I contacted them to give me more details about some of non-formal programmes such as peer visit.

- The sixth step was to create categories by grouping all the relevant codes together; i.e. grouping codes which belong together under one category. For example, 'short courses, practical and theoretical, compulsory programmes'' all these codes were grouped under 'CPD is formal' category. Then, a thematic approach was adopted by creating themes, most of which were organised around the main research questions. For example, the aforementioned category ('CPD is formal') was grouped together with other categories (e.g., 'Informal is also CPD', 'Continuous learning') to answer the first research question (theme: The meaning of CPD).

Name	Files	References	Created On	Created By	Modified On	Modified By
Apply CPD in teaching class		2	6 4/24/2018 2:13 PM	123	4/24/2018 6:34 PM	123
collabrative cpd		3	8 4/23/2018 7:06 PM	123	4/24/2018 6:34 PM	123
criteria of participation in CPD program		8	27 4/23/2018 4:04 PM	123	4/24/2018 6:33 PM	123
dealing with the difficulties		3	3 4/23/2018 4:01 PM	123	4/24/2018 3:40 PM	123
difficulties in teaching and to be a PE tea		14	79 4/23/2018 4:00 PM	123	4/24/2018 6:36 PM	123
example of good CPD programme		6	12 4/23/2018 4:04 PM	123	4/24/2018 6:30 PM	123
follow up		3	8 4/23/2018 6:35 PM	123	4/24/2018 6:34 PM	123
level of CPD		8	12 4/23/2018 4:02 PM	123	4/24/2018 5:52 PM	123
meaning of CPD		9	12 4/23/2018 3:59 PM	123	4/24/2018 5:37 PM	123
New Node		0	0 4/24/2018 4:52 PM	123	4/24/2018 4:52 PM	123
number of CPD programme		8	13 4/23/2018 4:02 PM	123	4/24/2018 5:57 PM	123
opinion regarding the curriculum and cy		2	3 4/23/2018 5:19 PM	123	4/24/2018 5:56 PM	123
opinion regarding workshop		12	53 4/23/2018 5:32 PM	123	4/24/2018 6:35 PM	123
overcome the difficulties		8	30 4/23/2018 5:26 PM	123	4/24/2018 6:36 PM	123
prevent from attending workshop		4	5 4/23/2018 4:09 PM	123	4/24/2018 4:52 PM	123
punishment of not attending mandatory		1	1 4/24/2018 2:16 PM	123	4/24/2018 2:16 PM	123
self improvement		1	1 4/24/2018 5:52 PM	123	4/24/2018 5:52 PM	123
self improvement		1	2 4/23/2018 7:00 PM	123	4/23/2018 7:05 PM	123
some suggestion to overcome some of t		1	1 4/23/2018 6:50 PM	123	4/23/2018 6:50 PM	123
teaching schedule		9	15 4/23/2018 5:07 PM	123	4/24/2018 5:37 PM	123
the benefits of CPD workshop		5	10 4/23/2018 4:03 PM	123	4/24/2018 6:29 PM	123

Figure 10: Initial codes of CPD providers' transcripts

<p>interview observation</p> <p>Click to edit</p> <p>department, for instance, the department of supervision, the department of curriculum, the department of evaluation or the department of activities in the General Diwan of the Ministry. We invite supervisors from other governorates as well to suggest programs, after that we present the suggestions to all governorates, then the program is shaped. Otherwise, we do not specify a certain program for supervisors. the do not work individually (why).</p> <p>n your opinion do you think that this number of programs (4 in the ministry and 3 in the directorate) is enough to develop teachers?</p> <p>They might be enough and they might not. They are enough if they meet teachers and supervisors' needs and are presented by specialized instructors during sufficient period of time. We used to implement the applied program on three games but the benefit was less so we decided to make the program on one game which the trainees would practice five days a week by a specialized instructor. For instance, if the program was on volleyball the instructor would be specialized in volleyball or accredited coach accompanied with volleyball referee. (very important's idea)</p> <p>here the most important difficulties is the interaction between the providers and</p>
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Figure 11: Memo of CPD providers' transcript

5.5. Results

Overall, the CPD providers acknowledged the importance of CPD for all teachers. It was evident that they had a strong and a positive view about the need and importance of CPD for teachers. They all agreed that teachers can benefit greatly by CPD participation and that CPD

has an important role to play in meeting teachers' professional learning needs and in offering support, so that teachers cope with the rapid changes in the work environment and to follow the pace of modernization of the curriculum. Despite these positive perceptions about the importance of CPD, the CPD providers shared some concerns regarding the repetitive content of opportunities and the limited number of CPD programmes offered to teachers. Most CPD providers attributed the limited CPD opportunities available to the financial crisis. In this section, quotes from interviews are identified by means of individual numerical codes given to each CPD providers (e.g. Provider 1 = P1, Interview 1= In1).

5.5.1. Theme 1: CPD providers' perceptions on the meaning and the importance of CPD (and what CPD they offered)

Most CPD providers interviewed appeared to understand CPD as a formal structured process that should be designed with the aim to improve teachers' practices. For example, CPD was described as a 'process that could improve the employees' (P4, In1), especially when 'specially designed programmes' that aim to support teachers

'improve their performance in the field' (P2, In1) were offered. Some providers explicitly talked about the 'requirement' for and responsibility of all teachers to engage in CPD throughout their careers (P1, In1). Others acknowledged the importance of continuous CPD engagement because of the "accelerated developments in teaching and learning" (P7, In1), which are sometimes led by the "global priority" of improving the quality of education (P7, In1), and which has recently shaped education in Oman too. As this provider put it|:

“Knowledge develops every day. It is important that teachers are aware of these changes and developments as they are relevant and necessary. So, participating in CPD programmes is important” (P1, In1).

Participation in formal CPD was also important for teachers to address the challenges they encountered in their everyday work. In short, for one provider (P7, In1), ‘CPD is important so that they [teachers] follow the pace of modernization of the Education system’ which has implications in how they are expected to teach and support students to learn. There was another important reason for pursuing CPD. For some providers, teaching can become routine and teachers’ practices might become repetitive and “monotonous” (P10, In1). To avoid professional “boredom” (P10, In1), participation in workshops and courses was important as these opportunities could, in theory at least, provide the right stimulus and information to change their practices: “These courses can renew teachers’ energy”, can rebuild their enthusiasm and give them the information they need to differentiate their teaching (P10, In1).

There was of course a shared belief that the real benefits of CPD can be evident when teachers changed elements of their practice: or, as explained by one provider, “the benefits accrue when teachers apply it [new knowledge] in practice” (P7, In1). Another CPD provider mentioned that engaging in different CPD was not just beneficial for the teachers but it could also improve and enhance students’ learning:

” CPD can not only improve the quality of teachers’ practices but it can lead to important improvements in students’ learning and achievements too” (P2, In1).

It was in this context that some providers mentioned not only the formal dimension, but also acknowledged the importance of other activities which seemed to reflect non-formal and even informal opportunities.

Interestingly, when CPD providers shared their views about other ways teachers learn, they were not always framing these using the concept of CPD but rather as general activities that were part of teachers' everyday / daily activities that could lead to professional learning. One provider however explicitly talked about the concept of CPD as a broad concept or process, including any form of professional learning, from initial teacher training and including both formal and informal activities:

*“CPD includes everything, all activities that help the teacher to develop their skills they developed during their preparation in the education colleges;
and when teachers are appointed in their school, they can then start developing, modifying and updating their skills” (P6, In1).*

Two supervisors (P3, In2 and P1, In2) reported sometimes running activities that were neither centrally funded nor attached to a formal qualification. These activities included, for example, peer visit, model lessons and teacher exchanges. The organisation and implementation of these activities were seen as part of their professional responsibilities. Peer visits, according to the supervisors, were important because colleagues had opportunities to observe others and to evaluate the content and effectiveness of the specific application of an approach or idea that might new or different. Such observations, they both

believed, can lead to improvements of teachers' practice, as they offer tangible and realistic suggestions to them.

For similar reasons, model lessons appeared to be a favourable activity carry out by the supervisors when visiting schools. Specifically, the supervisor explained that it was part of their professional responsibility to run at least one model lesson each year in local schools, which were selected by the supervisors themselves (based on need and performance). This model lesson was important because it could support teachers to clarify some of their questions around a specific teaching strategy.

The aim of this exchange visits was to allow teachers to engage in professional conversations about new teaching strategies, to exchange experiences, and to work together around a specific teaching approach. In general, all these activities were organized in order to address some of the teachers' needs and difficulties. They were seen, in other words, as valuable activities supporting the learning and development of the teachers; and as tools to support them address their limitations.

Some providers also believed that teachers should learn at their own time, at their own volition, through what they described as "self-learning". This self-initiated, self-motivated learning was important in the absence of regular formal CPD for some providers (P1, P3, P7, P8 and P10), (In1). There was a general belief that this can be done relatively easily, given the opportunities teachers have to "access different sources via the internet these days" and to "read and search for what is new with one touch" and with relative ease (P3, In2). In fact, as one provider underlined (P1, In2), it was important for teachers to take the

initiative to engage in self-study as this engagement would resolve some of their questions that did not require specialised intervention. This would mean that teachers can get timely answers, when they need them rather than await a specialised workshop to do so:

“Sometimes, we urge teachers to self-learning especially when their issues or questions are as simple as ‘how to set lesson objectives’ This does not require a specialised tutor or instructor” (P7, In2).

In some cases, many believed that the development of professional knowledge and practice depends wholly on the individual and his/her eagerness and commitment to learn: “We should not forget that that depends on the teacher him/her self” (P1, In1). In addition to self-learning that happens through personal study or a meaningful look at the available resources / support on the internet, some providers (P8, In1 and P10, In1) could identify a small number of PE teachers who demonstrated this independence and eagerness to learn; who were very active and self-directed learners, and who constantly looked for CPD opportunities. They were the same teachers who also made tremendous personal efforts to improve the facilities at their school (swimming pool, playground, and sports umbrellas) rather than waiting “passively” for the government to provide and improve schools’ facilities. For three providers (P1, In1 P8, In1, P10, In1), these teachers’ motivation was exceptional and it was that was needed to “make a difference” (P8, In1).

Five CPD providers believed that teachers’ motivation was also important in terms of what each teacher could take out of a formal CPD programme, and how they could then use that knowledge to support their colleagues. For example, one provider (P10) argued that when

teachers are motivated, they can support each other to learn and progress in various ways; by sharing for example new knowledge with colleagues with the aim to support and train them. Even though CPD providers agreed that teachers could benefit each other, they realised that there was no guarantee that they would transfer this knowledge in real work environment since most of the CPD providers did not offer any follow up to make sure that the teachers applied new knowledge (P7, In and P8, In1). CPD providers agreed that evaluation or follow up was particularly important, ‘but it was impossible to train and follow up all the teachers on CPD courses; hence, teachers were the one who were responsible for cascading what they have learned’ (P1, In1 and P7, In1): “at least 50% of a workshop’s benefits are gained by passing knowledge on colleagues” (P7, In1).

Other provider (e.g., P1, In1) also believed that formal CPD could be more effective if teachers were encouraged to work in groups rather than individually, as they could exchange ideas, share views and experiences, come across a range of suggestions, and discuss their issues and concerns with the aim to find some common solutions:

“Group work is better than individual work, thus because involving in groups and doing activities, the whole group would work together and shared views” (P1, In1).

He added that for example, some of teachers had difficulties on some certain aspect, in the end, teachers said I knew about this teaching strategy for example because X teacher explained into me” (P1). CPD providers added that the ideas are transferred not only within one school but with other teachers from other schools by inviting them to attend some of the workshops.

5.5.2. Theme 2: CPD providers' views on the nature and quality of existing CPD provision (and what barriers they encountered)

“I don't think it is perfect. However, it is more or less good” (P5, In2).

Overall, all CPD providers interviewed believed they are doing a good job. As previously noted, it was difficult for them to be certain that their work had a positive impact on teachers and students, because of the lack of evaluation structures in place. They were however overall confident that they offered a quality experience. It was also evident that they were very eager to share the barriers they encountered when planning for formal CPD; and their overall observations of the wider issues with CPD provision in Oman at the time of the research.

All providers believed that the process of applying for running a CPD for teachers was unnecessarily complicated. As a consequence, getting approval was very difficult. There was however a paradox. The CPD providers interviewed felt that staff in key positions in the new training centre “restricted them with a million rules” but they appeared to approve programmes proposed by external providers, such as coaches, relatively easily (P10, In2). “Another tutor explained that “the procedures become more complicated year by year” (P7, In2). There was some agreement that the MOE requests too many trivial details about each workshop before approving it. The whole process was described as “really pointless and time-wasting” as the level of detailed required left one provider wondering whether this was similar to the process of “writing a master's thesis” (P1, In1). This complicated

and lengthy process seemed to have prevented some of these CPD providers from running CPD opportunities with the aim to introduce new ideas.

Despite these difficulties, all CPD providers interviewed explained that there were opportunities to organise formal CPD events on a regular basis (workshop, seminar) but not as extensively as they would have liked. They could not identify a fixed number as the number of programmes offered varied from year to year. There was a consensus that the government would fund a very large number of opportunities, including workshops, symposiums, and conferences at a national level (“you would be shocked by the number”, P6), but much less funding was available for local CPD, organised and run by the governorates. Funds for between three to five programmes per year were available and this represented a significant decrease in the number of programmes available, largely because of the financial crisis, these providers believed. In one area, the provider explained that “ten years ago, we were allowed to design as many [CPD programmes] as we wanted; now we might get approved for only two programmes” (P1, In1). They also put restrictions in terms of the number of participants attending to ensure that the quality of the experience is not compromised. Limiting the number to teachers attending a programme to 25 was based on the belief that teachers could not fully benefit from the practical side of the programming if the number of participants was too many (P6, In1).

The CPD providers also talked about centrally designed CPD programmes, which are typically aligned to national educational priorities. Usually, such programmes are designed centrally but implemented locally by the relevant directorates. They explained how the MoE encouraged local providers to change the content on the basis of teachers’ needs. On many

occasions, the justification for the specific CPD focus was based on a thorough needs analysis, according to the information from the MoE. The process was described as follows: evidence collected via lesson observations by the supervisors were analysed by senior supervisors and recommendations were made on what CPD programmes to run.

Despite this effort to select CPD programmes that address teachers' real needs, some providers admitted that some of CPD run on a yearly basis and there was no diversity on the programme that was offered to teachers. This "lack of change of the CPD programmes" was identified as one of the "greatest challenge" of CPD provision at the time of the research (P8, In1):

"It is true that most of the programmes are founded on teachers' needs, but some of them do not change for years" (P1, In1).

The CPD providers also raised concerns about other CPD providers. They explained that the MoE often employed sport coaches to deliver CPD workshops in various sports, such as volleyball, basketball etc. The CPD providers had serious concerns about the quality of delivery in such programmes. Their main argument was

that the sport coaches had no teaching experience. They were thus treating teachers as players and most of the knowledge / skills covered were done in a way that was not relevant to teaching PE in schools. As a result, according to all the providers interviewed, these workshops did not teachers' needs:

“I have observed that even warm-ups were not suitable for teaching” (P7, In1).

5.5.3. Theme: CPD providers’ view on how to improve the existing CPD provision

“The Ministry of Education has made a great deal of effort in order to improve the area of the professional development, but this is not enough, so I think we still need more things to change and more effort [to put into CPD]” (P5, In2).

To improve the current state of CPD provision, according to the CPD providers who participated in the present study, a number of important steps need to be taken. These included reducing the bureaucratic requirements in submitting CPD proposals; and making the process less complicated but more transparent. The process of selecting the providers is paramount and avoiding sport coaches that deliver programmes that are targeting coaches rather than teachers should be prioritised. It was also proposed establishing a high quality CPD for newly appointed teachers. Providers felt that the quality of teachers with different initial qualifications varied significantly and these issues needed to be addressed through a systematic and sustained programme targeting newly appointed teachers.

Establishing clear, detailed evaluation processes, including teacher feedback on the quality of CPD was also paramount. As one provider explained, ““teachers’ feedback can help me to do better next time that I prepared a workshop” (P2, In1). Although some evaluation (post-CPD) is taking place, the providers rarely became aware of teachers’ views (e.g., “The MOE did evaluate the programme as a whole, but I do not know the

result of this evaluation”, P2, In1). Furthermore, although some evaluation was taking place at the time of the research, this was not done in a meaningful way as the true effects of a programme were rarely known. Some form of follow-up, sustained investigation of what is going on following structured CPD programmes was required to “recognise the actual benefits” (P3, In2). The evaluation evidence collected should inform existing and future provision:

“The ministry's role is to monitor provisionand to make sure to never move to subsequent, more programmes without ensuring the benefit of the first” (P7, In2).

There was indeed recognition that the quality of what was available should be prioritised, instead of a persistent focus on teacher numbers:

“All we need in the coming period is to focus on the quality of the programs rather than the quantity; we should offer more quality programmes rather than programmes that involve large number of participants which means it is difficult to monitor what is happening as well” (P9, In1).

One provider (P7, In1) believed that the issues covered / addressed during CPD programmes were perhaps too many and suggested instead that it would be much more beneficial if fewer topics or issues were discussed but appropriate, practical opportunities were offered (“That would be much better than trying to cover all the methods too fast and without any practice!”). He also mentioned that focusing on quality would give teachers a chance to put the theory into practice and learned the skills “Many teachers would learn many things, but how many could apply them?” (P7, In1).

To improve the quality of provision, three further important aspects needed review and reconsideration according to these providers: the professional development of CPD providers, the ways CPD content was decided, and the ways PE teachers were targeted to attend. In relation to the former, supporting CPD providers with relevant and meaningful CPD was paramount. There was consensus that CPD providers were also in need for more preparation courses especially at the beginning of their career in order to develop knowledge and skills to effectively design and deliver CPD programmes for teachers. In relation to the second point, there was agreement that the process of identifying teachers' need to inform the content of CPD programmes should be revisited. One provider implies that the process is superficial and suggested to "determine the right needs, learning from the lives of physical education teachers" (P4, In1). Other providers suggested that the MoE needs to ensure that the same topics are not addressed in the same way, year in-year out and further opportunities and freedom to tailor provision according to local teachers' needs were needed:

"The MoE should not order the same topics to be covered in all CPD programmes in all the governorates, because teachers do not all have the same problems. This wastes time and resources (P1, In1).

"Sometimes, we are required to hold a workshop on a topic that is not an area of concern in our governorate. This should change" (P1, In1).

Evidence on teachers' needs could be determined via supervisors' regular visits. Teachers themselves should be consulted as they are more aware of their own needs than others.

There was also some discussion over who should be invited to attend. For some providers, the right professionals, with the right attitudes and motivation should be invited. These are the professionals who want to make changes and have the desire to transfer this knowledge to other teachers in their school. According one provider, teachers should not be encouraged to “take part in a course merely to relieve the boredom of the daily routine!” (P7, In1). Teachers’ abilities should also be utilised by inviting them to run programmes themselves (from teachers for teachers) (P3, In1 P10, In1), as “being a supervisor does not mean being better than anyone else” (P3, In1). The supervisors believed that some teachers were willing to cooperate and to co-deliver a range of workshops based on their expertise. Non-formal, social ways of learning were also advocated. One provider proposed that teachers should gather at least once a month to discuss issues regarding teaching with the intention of sharing the wealth of knowledge and experience they have: “This would be a great way to learn. It does not have to be something formal or approved centrally - they could just do it in a friendly way in their own schools” (P1, In1). This was in line with the importance of establishing a ‘self-improvement’, ‘self-learning culture’ (P7, In2) as teachers relied on themselves and their colleagues to learn and grow professionally (P7, In2).

5.6. Discussion

The purpose of this study was to [examine the key aspects of the existing government-funded CPD system in Oman from the perspective of CPD providers. The nature and mode of CPD delivery is affected by the education system in each context (Sabah et al., 2014), be it centralised or decentralised. At a centralised level, for example, the design, implementation

and evaluation of CPD provision are primarily the responsibility of government departments and organisations. At a decentralised system, schools and other local organisations have responsibility for CPD (Sabah et al., 2014). Based on the evidence collected from these CPD providers, CPD provision in Oman is primarily centralised with some decentralised features. However, as these CPD providers explained, even though most of the programmes were organised by the Ministry of Education (centralised level), they were not always up to scratch, since most of them seemed to adopt a one-size-fits-all approach and did not take participants' needs into account.

For a long time, traditional, formal CPD programmes have been criticised in the international literature for failing to address participants' individual learning goals and need (Keay et al., 2019). Due to their diverse profiles and professional learning needs, teachers should be expected to have different learning goals at different stage on their career (Louws et al., 2017c); and CPD should be organised alongside this diversity. This did not appear to be the case in Oman. On the contrary, one of the main criticism from many providers was that teachers are not involved in shaping the content of the programme in a meaningful way, hence, as explain in other publications grounded in evidence collected in different national contexts (Makopoulou & Armour, 2011b, Louws et al., 2017b), most of these programme failed to address teachers' goals and needs. It was clear that these providers sought greater control in CPD provision, with a less complicated bureaucratic process and expressed desire to ensure that teachers are consulted so that CPD is personalised. In this way, provision would be less repetitive.

Personalising CPD provision, however, is a complex objective, since it is difficult to design a CPD programme that can meet all teachers' needs (Makopoulou and Armour, 2011b, Armour et al., 2017). It is clear that teachers who teach in secondary schools have different needs from teachers who teach in primary schools, and also that the needs of novice teachers vary according to the stage in their career they find themselves at (Griffiths et al., 2016). This issue resonates with the findings in Paper two, since most teachers recommended that teachers who teach different stages or grades should not be lumped together in one programme. This outcome is not so surprising, since the literary review discussed that teachers differ in terms of their aims from participating in CPD and what they want to learn, as well as how and why (Berliner, 2001, Anderson and Olsen, 2006), on account of being at different stages in their professional lives (Day et al., 2007, Olsen and Anderson, 2007, Anderson and Olsen, 2006, Rolls and Plauborg, 2009, Louws et al., 2017c) .

These CPD providers believed that to improve the quality of provision, professional developers should be supported to learn and grow. Some providers were concerned that they were not adequately prepared and supported and this might have had a negative effect on the quality and impact of CPD. Researchers have consistently argued that the knowledge and experience of CPD providers are important components in CPD provision (Makopoulou, 2018). This was an issue identified by the PE teachers (study 2). ,There seems to be consensus in the international literature that when external experts are involved in facilitating teachers' CPD, they need to be skilled, competent, and specialists (Sabah et al., 2014) as they mediate in a significant way the ways teachers engage with an educational issue or process and the knowledge they develop as a result (Harris et al.,

2006, Goodall et al., 2005). In this context, it has been argued that teachers are not the only professionals with the need to sometimes radically rethink and review their teaching practice; even experienced professional developers have also to relearn and update their learning and knowledge (Patton and Parker, 2014).

These CPD providers were also concerned that the quality and relevance of existing CPD provision was sometimes compromised, when non-teaching specialists such as sport coaches or players were running programmes. They explained how the CPD

was not appropriately targeting teachers and failed to support them in developing their pedagogical content knowledge. This CPD failed, in other words, to serve the needs of teachers. This is another issue raised by the PE teachers in study there is evidence in the international literature that the presence of external experts in CPD endeavours does not guarantee its success (Timperley et al., 2007). These experts need to have more the appropriate training and knowledge to tailor the provision to the needs and interests of the teachers (Timperley et al., 2007).

In Oman, like most other countries, the availability of CPD is relatively limited (Hadjimatheou, 2017, AL-Balushi, 2017, Makopoulou, 2008), and this is an issue identified by teachers in the previous two studies reported in this thesis. Based on the findings of the present study, CPD providers believe that the number of CPD programmes is insufficient to improve teachers' pedagogy and practice. They however believed that teachers should take more ownership and control of their CPD and to learn to rely on their own ability to learn rather than wait for specialised and centralised support. The CPD providers emphasised that

teachers have to be self-directed learners in order to update and develop their knowledge; and they should strive to learn, individually and collaboratively, to solve problems in relation to their teaching and learners. This perspective aligns with contemporary debates about the knowledge society and professionals as lifelong, independent learners (Colley et al., 2002).

Another crucial finding is the lack of thorough evaluation of CPD provision. In Oman, like other countries, the manner of evaluating the impact of any CPD programme is still questionable. It has been argued by providers that questions about CPD impact are as important as, and related to, questions about how and who designs and delivers CPD. Capturing CPD impact, alongside evidence on the extent to which objectives are met is also acknowledged in other publications (Sabah et al., 2014). In Oman, the system of evaluation is still at an embryonic stage of development; and it is a top-down process (Al Jabri et al., 2018). To address this, it is important the evaluation process to be reviewed thoroughly and to ensure that evidence about the different levels of impact is collected. Specially, as evaluation researchers suggest (Guskey, 2002a), evidence about the impact on teachers' knowledge and practice, as well as pupil achievement and whole school development needs to be collected to provide a clear picture of CPD impact.

5.7. Conclusion

It appears that in Oman, some efforts are made to capture teacher satisfaction, but to develop the system further, more sophisticated methods and approaches need to be employed to capture impact in these other levels and in a more sustained way.

CHAPTER SIX

6.1. General discussion

Teachers are expected to develop professionally throughout their different careers to ensure that they keep abreast of developments in educational theory, research and policy and to be able to offer high quality learning experiences to all their learners within complex workplaces (Louws et al., 2017c). As reported throughout this thesis, a significant number of studies have examined the process and factors influencing the professional learning of teachers, the activities they engage in in various (formal and informal) contexts, what approaches to CPD are working or not (and why). Nevertheless, the vast majority of published research originates in Western societies and little is known about teachers and CPD providers' perspectives on this important matter in various and diverse national contexts. This is particularly the case for Oman, where teachers' CPD is a relatively underdeveloped field of inquiry.

The study set out to examine the nature, quality, and perceived effectiveness of CPD opportunities for PE teachers in the Sultanate of Oman. A mixed methodology was employed. Specifically, both qualitative and quantitative evidence was collected to examine PE teachers' perceptions (via a national CPD survey and detailed teacher case studies). Qualitative data were obtained via interviews with CPD providers too. It is important to underline that, despite the researcher's efforts, the response rate for the CPD survey was low, so findings cannot be generalised. The available evidence however provides useful insights into some of the issues the teachers and providers encountered at the time of the research; enabling the consideration of specific actions that could be taken to improve the existing PE-CPD provision in Oman.

All these three studies are linked together in order to answer the main research question. For example, the first study aims at ‘mapping the terrain’ (Borko, 2004) of existing provision and provides a clear description of PE teachers’ perspectives at the time of the research (rather than explore change over time). The results showed a limited number of CPD activities available for PE teachers over the last five years. Also, the result demonstrated that teachers have mixed thoughts on the existing CPD provision (quality of CPD and school support). The design of the first study did not permit a more an in-depth elaboration on why this limited CPD participation was evident and why there is a mixed thought regarding CPD quality and school support. Therefore, it was important to conduct another study (study two) to gain more in-depth understanding regarding CPD and to provide some clarification of why there were limited number of CPD and the mixed thoughts regarding CPD quality. It was decided to focus on post-basic education because most of the responses of the first study were collected from this type of schools, also based on Oman policy, most of the CPD programmes are designed for to post-basic education. The result of this study showed that most of the teachers’ responses revolve around the first study regarding the quality (funded-government CPD) and the limitation number of CPD chances. Therefore, it was important to investigate why teachers were not satisfied with funded-government CPD programmes. The first and the second studies were not sufficient to reveal any issues regarding funded-government CPD. Therefore, it was important to consult someone who is familiar with designing and delivering CPD to find out more regarding CPD policy in Oman. For that, the third study aims to was to examine the key aspects of the existing government-funded CPD system in Oman from the perspective of CPD providers.

In this chapter, each of the three studies is summarised, including key findings, followed by reflections on the limitations of the study, recommendations for future research and a final conclusion.

6.2. Summary of findings

6.2.1. Chapter three (study one)

The aim of the first study was to provide evidence on the nature, quality, and effectiveness of the available CPD opportunities as perceived by Physical Education (PE) teachers in Oman. The principal data collection tool was an online CPD survey. A total of 499 teachers agreed to participate in the study but a smaller number provided full responses. The main finding was that the number of CPD opportunities these PE teachers enrolled did not match policy aspirations. There was therefore a clear issue regarding the quantity of CPD. Another important finding was that just over half of the teachers believed that the existing CPD programmes were relevant but also 17% felt they were irrelevant. Results suggested that teachers' perceptions regarding the relevance of the available CPD did not influence the number of CPD they have pursued. Findings also suggested that the level of teachers' satisfaction with the opportunities currently available was mixed. Equally, some teachers believed that participating in CPD might have a positive impact on their teaching practices; but this was not the case for all teachers. Finally, teachers reported that their schools provided one CPD opportunity each year. Thus, results suggest that the important role of school-based CPD could be further capitalised.

6.2.2. Chapter four (study two)

The aim of the second study was to examine teachers' experience and perceptions regarding the nature, quality and effectiveness of the current professional programme in Oman. A qualitative approach was adopted in this study. The main data collection tool employed was semi-structured interviewing. A total of 11 female PE teachers from four post-basic schools were invited to take part in this study and they all agree to participate in one individual, face-to-face interview and follow up telephone interviews. The main finding of this study was that teachers had negative perceptions as overall regarding the content and quality of CPD opportunities available to them. As most of the content was repeated and delivered sometime by non-specialists, most of the formal, structured CPD programmes they had pursued did not meet their needs. However, teachers had different ways to deal with these reported limitations of formal CPD and they displayed a clear desire to continue to learn. They did not have to rely on the formal provision but rather reported learning all the time on-the-job by modifying some of the learning resources to suit the subject of PE/sport.

6.2.3. Chapter five (study three)

The aim of the third study was to examine the key aspects of the existing government-funded CPD system in Oman from the perspective of CPD providers. Ten CPD providers working in different organisations with CPD responsibilities were invited to participate in an individual semi-structured interview. The main finding of this study indicated that CPD providers shared the same views as those teachers involved in studies one and two. They believed that the number of CPD opportunities was limited, so teachers had to rely on themselves for any improvement. CPD providers were however overall confident that they

offered a quality experience. It was also evident that they were very eager to share the barriers they encountered when planning for formal CPD; and their overall observations of the wider issues with CPD provision in Oman at the time of the research. To improve the current state of CPD provision, according to the CPD providers, a number of important steps need to be taken. These included reducing the bureaucratic requirements in submitting CPD proposals; and making the process less complicated and more transparent.

6.2.4. Applications

Based on the results from the three studies reported in this thesis, there are a number of implications for CPD policymakers and key stakeholders in order to improve the availability of CPD programmes for PE teachers in Oman. It is important CPD policy makers and stakeholders (including school leaders and teachers) to not only acknowledge the importance of professional learning that takes place in various contexts, including the school context, but also provide the right infrastructure and education so that teachers' engagement in these various forms of learning is adequately supported. The importance of CPD participation should be justified and more attention should be given to the content of various CPD programmes to avoid repetition and to ensure that innovative approaches are offered to challenge teachers to progress in their learning (Armour et al., 2017).

The right conditions must also be put in place to enable teachers to review their existing practices in a way that benefits students. CPD provision should be more targeted to individual teachers' needs and this can be achieved if key CPD stakeholders ground their work in teacher voice. In other words, teachers are consulted and are actively engaged in shaping the content and direction of CPD provision. It would be useful if teachers were encouraged to create their own portfolios in which to record their professional learning

experiences and any difficulties, they face so that they get adequate and targeted support. Finally, it appears paramount to develop feasible and sophisticated approaches to capture not only CPD processes but also CPD impact on both teachers and students. Some of these implications are also relevant to future CPD research as outlined in the following section.

6.3. Limitations and recommendations for future research

There are some important limitations that need careful consideration. Firstly, given the poor response rate to the CPD survey, and the decision to focus on female PE teachers working in post-basic schools, results cannot be generalised in the traditional sense. This means that it is impossible to be certain that these are the most important issues all PE teachers in Oman face. Secondly, the CPD survey included only closed questions with the aim to obtain quantitative evidence. This decision was made to increase response rate but in retrospect further in-depth data could have been obtained to illustrate or explain the results obtained. Thirdly, the reliance on one data collection tool per study (interviewing and survey) restricted opportunities to triangulate and gain more in-depth data. Fourthly, although an effort was made to capture the perspectives of both teachers and CPD providers, it was perhaps also important to include policy makers, in order to get a much more informed understanding of the rationale underpinning current structures and processes in place.

The study, finally, sought to examine perceptions and experiences rather than robustly explore the effects of CPD on teacher and pupil learning outcomes. This means that there are still important questions unanswered about the true effects of the existing PE-CPD provision in Oman. In this context, thirdly, there is also a need to develop theoretical and

practical knowledge of diverse methodological approaches that can effectively measure impact; and to provide sufficient detail to inform CPD policy and practice. It could be argued that since CPD, and PE-CPD, is a relatively underexplored field of inquiry in Oman, results from the present study can however make a contribution towards this latter objective; i.e. to inform policy and practice.

Despite these limitations, the present study is the first of its kind in the context of PE-CPD in Oman and offers interesting insights. Further research is however needed to build upon current research. Specifically, there is a need for research to unpack further the non-formal and informal learning that occurring in schools. This is particularly pertinent in the Omani context given the recent development at the level of educational policy where schools are recognised as sites for professional learning (MoE, 2009, MoE, 2012). It was evident that the teachers in the study reported engaging in some informal learning, but they also acknowledged some barriers they encountered along the way. Hence, future research should aim at refining our understanding regarding the types and kinds of professional learning activities that are feasible and impactful at the school level.

The need for evaluation research focusing on a range of CPD, not just informal but also formal opportunities, was acknowledged by the research participants in the present study. There is also a clear need to evaluate the effects of such initiatives in a robust way, by looking at how teachers and students benefit as a result of CPD participation in these various forms in the short and long term. Future research should also draw upon and employ a range of data collection tools. For example, observations might be relevant to capture changes in teachers' practices and/or pupil engagement prior to and following CPD engagement. The

use of observational research could also provide concrete evidence and examples of actual practices, how they are implemented in schools, and the potential difficulties teachers are facing that might hinder them from any creative teaching. Alongside an emphasis on examining CPD processes and impact, future research should also adopt participatory and emancipatory approaches to research with teachers and students co-constructing knowledge with researchers. This means that instead of collecting data from the participants, the research process involves the participants in developing new understandings. For example, a recently developed collaborative action research approach, the Inclusive Inquiry Approach (Messiou et al., 2016), locates student voice central in this collaborative process, enabling for example student-researchers to collect evidence from their peers on the nature and impact of new pedagogies implemented by their teachers as part of the CPD programme. Previous applications suggest that it is student voice that ‘brings a critical edge to the process’ and which ‘has potential to challenge teachers to go beyond the sharing of existing practices’ (Messiou et al., 2016, p. 56). Other contemporary approach to CPD, including the application of digital technologies is another fruitful avenue of inquiry.

6.4. Conclusions and Recommendations

The aim of this thesis was to examine the nature, quality, and perceived effectiveness of continuing professional development opportunities for PE teachers in the Sultanate of Oman. A mixed methodological approach was adopted, with the first study seeking to capture teachers’ perceptions at a wider scale, through a teacher CPD survey. The second and third study adopted a case study approach, and semi-structured interviews were carried out with the aim to collect in-depth insights on some of the possibilities and challenges in the current CPD system. A common message is that the powerful of informal

professional learning has scope for further development. This is in line with the realisation that teachers are the ones who can make a change to this practice (Day et al., 2007). Moreover, developing and evaluating a sustained approach to formal CPD, so that programmes are well designed and aligned to teachers' needs is also paramount (Lessing and De Witt, 2007). It is also evident that CPD providers should examine the impact of the programmes they deliver, and they have to encourage teachers to learn and improve themselves. There is also an urgent requirement for the government to improve school facilities. Future researchers should examine the impact of CPD programmes on teachers' practices and student learning.

Finally, this thesis helped me to rethink my job as a lecturer and as a CPD provider, and what I can do to help teachers get the benefits they desire from participating in any CPD programme. Now that the PhD journey is almost complete, I have three important areas that I will focus upon to help improve the current status of CPD in Oman. Firstly, in terms of formal CPD, it is important to listen to teachers and CPD providers' voice and to use this information to inform the development of CPD programme needs. Secondly, and in terms of informal learning, the importance of informal learning needs to be explained and teacher educated to maximise their engagement and the outcomes of this process. One particular message is that teachers need to learn to challenge each other in a productive and collegial matter. Thirdly, and in terms of non-formal CPD, school management need to be aware about the importance of CPD for teachers and to provide the right conditions for teachers practice and apply what they have learned from the CPD programmes. Moreover, the administrative staff at school should be trained how they can support teachers' learning at schools.

It is my intention to be heavily involved in PE-CPD; and to ensure that PE teachers are actively contributing to the content and direction of these opportunities. I also plan to publish papers to reach out to more people who are responsible for the design and delivery of CPD. It is also important the findings from this study to be communicated to PE teachers and CPD provider, through school visits and the organisation dissemination seminars.

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